

```

Db      1021 AAGATCTGATGAAGCCCGAGCGTGTTTTAAAGATTTCGAAGACATCTTTCATGCGCAAAAAG 1080
QY      1081 TGATCATGTTTTTTAATTAAAGAGTAAGAAGCCCCAAAAAAA 1120
DB      1081 TGATCATGTTTTTTAATTAAAGAGTAAGAAGCCCCAAAAAAA 1120

RESULT 2
US-08-101-624-1
; Sequence 1, Application US/08101624
; Patent No. 5942607
; GENERAL INFORMATION:
; APPLICANT: Freeman, Gordon J.
; APPLICANT: Nadler, Lee M.
; APPLICANT: Gray, Gary S.
; TITLE OF INVENTION: No. 5942607el CTLA4/CD28 Ligands and
; TITLE OF INVENTION: Uses Therefor
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 State Street, Suite 510
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/101,624
; FILING DATE: 26-JUL-1993
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Mandragoras, Amy E.
; REGISTRATION NUMBER: 36,207
; REFERENCE/DOCKET NUMBER: RPI-004
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 227-7400
; TELEFAX: (617) 227-5941
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1120 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 107..1093
; US-08-101-624-1

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|    | Query Match           | 100.0%;   | Score 1120;  | DB 2;      | Length 1120; |
|----|-----------------------|---|--------------|------------|--------------|
|    | Best Local Similarity | 100.0%;   | Pred. No. 0; |            |              |
|    | Matches 1120;         | Conservative  | 0;           | Mismatches | 0; Indels    |
|    |                       |   |              |            | 0; Gaps      |
| Qy | 1                     | CACAGGGTCAAAAGCTTTGGCTTCTCTGCTCTTAACAGAGGACTTAGCAGACACACAGGAT     | 60           |            |              |
| Db | 1                     | CACAGGGTCAAAAGCTTTGGCTTCTCTGCTCTTAACAGAGGACTTAGCAGACACACAGGAT     | 60           |            |              |
| Qy | 61                    | GAGTGGGGTCATTTCAGATATTAGGTCACAGCAGAGAAGCAGCCAAAATGGATCCCCAGTG     | 120          |            |              |
| Db | 61                    | GAGTGGGGTCATTTCAGATATTAGGTCACAGCAGAGAAGCAGCCAAAATGGATCCCCAGTG     | 120          |            |              |
| Qy | 121                   | CACATATGGAGCTAGGTAAACATTCCTCTTTTGATGGCGCTTCCTGCTCTCTGGTGGCTGGCTCC | 180          |            |              |
| Db | 121                   | CACATATGGAGCTAGGTAAACATTCCTTTTGATGGCGCTTCCTGCTCTCTGGTGGCTGGCTCC   | 180          |            |              |

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 20, 2004, 12:25:16 / Search time 87.5067 Seconds  
(without alignments)  
7102.827 Million cell updates/sec

Title: US-09-962-969B-22  
Perfect score: 1120  
Sequence: 1 CACAGGTCGAAGCTTCT.....AGAGTAAGCCCAAAAAA 1120

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA: \*  
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2: /cgn2\_6/prodata/2/ina/5B COMB.seq: \*  
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5: /cgn2\_6/prodata/2/ina/PCTUS COMB.seq: \*  
6: /cgn2\_6/prodata/2/ina/backfiles1.seq: \*

pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score  | Query Match | Length | ID | Description        |
|------------|--------|-------------|--------|----|--------------------|
| 1          | 1120   | 100.0       | 1120   | 2  | US-08-456-104-1    |
| 2          | 1120   | 100.0       | 1120   | 2  | US-08-101-624-1    |
| 3          | 1120   | 100.0       | 1120   | 3  | US-08-479-744A-1   |
| 4          | 1120   | 100.0       | 1120   | 3  | US-08-280-757B-1   |
| 5          | 1120   | 100.0       | 1120   | 3  | US-08-305-697A-22  |
| 6          | 1120   | 100.0       | 1120   | 3  | US-08-702-525-22   |
| 7          | 1120   | 100.0       | 1120   | 4  | US-08-403-253A-3   |
| 8          | 1120   | 100.0       | 1120   | 4  | US-08-435-816A-3   |
| 9          | 1120   | 100.0       | 1120   | 4  | US-09-425-762-1    |
| 10         | 1120   | 100.0       | 1120   | 4  | US-09-837-867A-22  |
| 11         | 1120   | 100.0       | 1120   | 5  | PCT-US95-02576-22  |
| 12         | 1014.8 | 90.6        | 1161   | 3  | US-08-305-697A-24  |
| 13         | 1014.8 | 90.6        | 1161   | 3  | US-08-702-525-24   |
| 14         | 1014.8 | 90.6        | 1161   | 4  | US-09-837-867A-24  |
| 15         | 1014.8 | 90.6        | 1161   | 5  | PCT-US95-02576-24  |
| 16         | 995.8  | 88.9        | 1424   | 5  | US-09-326-186B-226 |
| 17         | 995.8  | 88.9        | 1428   | 5  | PCT-US94-09642-1   |
| 18         | 990    | 88.4        | 1002   | 3  | US-09-039-982A-33  |
| 19         | 990    | 88.4        | 1002   | 3  | US-09-039-641-33   |
| 20         | 990    | 88.4        | 1002   | 3  | US-09-039-762A-33  |
| 21         | 990    | 88.4        | 1002   | 4  | US-09-042-492D-33  |
| 22         | 990    | 88.4        | 1002   | 4  | US-08-913-612A-33  |
| 23         | 972    | 86.8        | 972    | 3  | US-08-848-760B-11  |
| 24         | 738    | 65.9        | 751    | 3  | US-09-039-982A-34  |
| 25         | 738    | 65.9        | 751    | 3  | US-09-039-641-34   |
| 26         | 738    | 65.9        | 751    | 3  | US-09-039-762A-34  |
| 27         | 738    | 65.9        | 751    | 4  | US-09-042-492D-34  |

|    |       |      |      |   |                   |
|----|-------|------|------|---|-------------------|
| 28 | 738   | 65.9 | 751  | 4 | US-08-913-612A-34 |
| 29 | 533.2 | 47.6 | 1080 | 2 | US-09-103-040-5   |
| 30 | 407.2 | 36.4 | 1151 | 2 | US-08-456-104-3   |
| 31 | 407.2 | 36.4 | 1151 | 3 | US-08-205-697A-20 |
| 32 | 407.2 | 36.4 | 1151 | 3 | US-08-702-525-20  |
| 33 | 407.2 | 36.4 | 1151 | 4 | US-09-837-867A-20 |
| 34 | 407.2 | 36.4 | 1151 | 5 | PCT-US95-02576-20 |
| 35 | 407.2 | 36.4 | 1163 | 3 | US-08-479-744A-22 |
| 36 | 407.2 | 36.4 | 1163 | 3 | US-08-280-757B-22 |
| 37 | 407.2 | 36.4 | 1183 | 4 | US-09-425-762-22  |
| 38 | 394   | 35.2 | 1251 | 3 | US-08-305-697A-12 |
| 39 | 394   | 35.2 | 1261 | 3 | US-08-702-525-12  |
| 40 | 394   | 35.2 | 1261 | 4 | US-09-837-867A-12 |
| 41 | 394   | 35.2 | 1261 | 5 | PCT-US95-02576-12 |
| 42 | 325.2 | 29.0 | 330  | 3 | US-08-479-744A-44 |
| 43 | 325.2 | 29.0 | 330  | 3 | US-08-280-757B-44 |
| 44 | 325.2 | 29.0 | 330  | 4 | US-09-425-762-44  |
| 45 | 306   | 27.3 | 306  | 3 | US-08-479-744A-46 |

ALIGNMENTS

RESULT 1  
US-08-456-104-1  
; Sequence 1, Application US/08456104  
; Patent No. 5861310  
; GENERAL INFORMATION:  
; APPLICANT: Freeman, Gordon J.  
; APPLICANT: Nadler, Lee M.  
; TITLE OF INVENTION: TUMOR CELLS MODIFIED TO EXPRESS B7-2 AND B7-3 WITH INCREASED  
; NUMBER OF SEQUENCES: 8  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: LAHIVE & COCKFIELD  
; STREET: 60 State Street, Suite 510  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION NUMBER: US/08/456,104  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION NUMBER: 08/101,624;  
; FILING DATE: 26-JUL-1993;  
; APPLICATION NUMBER: 08/109,393;  
; APPLICATION NUMBER: 19-AUG-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mandragoras, Amy E.  
; REGISTRATION NUMBER: 36,207  
; REFERENCE/DOCKET NUMBER: RPI-008  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 227-7400  
; TELEFAX: (617) 227-5941  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1120 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 107..1093  
; US-08-456-104-1

APPLICATION NUMBER: US 07/864,805  
FILING DATE: 7-APR-1992  
APPLICATION NUMBER: US 08/247,505  
FILING DATE: 23-MAY-1994  
APPLICATION NUMBER: US 07/864,866  
FILING DATE: 7-APR-1992  
APPLICATION NUMBER: US 08/218,155  
FILING DATE: 25-MAR-1994  
APPLICATION NUMBER: US 07/864,807  
FILING DATE: 7-APR-1992  
APPLICATION NUMBER: US 07/902,467  
FILING DATE: 16-JUNE-1992  
APPLICATION NUMBER: US 07/275,433  
FILING DATE: 23-NOV-1988  
ATTORNEY/AGENT INFORMATION:  
NAME: Mandragouras, Amy E.  
REGISTRATION NUMBER: 36,207  
REFERENCE/DOCKET NUMBER: RPI-002CP4  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (617) 227-7400  
TELEFAX: (617) 227-5941  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1120 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 107..1093  
US-08-592-711-3

| Query Match           | 100.0%;      | Score 1120;  | DB 8;      | Length 1120; |
|-----------------------|--------------|--|------------|--------------|
| Best Local Similarity | 100.0%;      | Pred. No. 0;   |            |              |
| Matches 1120;         | Conservative | 0;   | Mismatches | 0;           |
|                       |              |  | Indels     | Gaps         |
| Qy                    | 1            | CACAGGGTGAAGCTTTGCTTCTCTGCTGCTGTAAACAGGACTATGACACAGACACACAGCAT | 60         |              |
| Db                    | 1            | CACAGGGTGAAGCTTTGCTTCTCTGCTGCTGTAAACAGGACTATGACACAGACACACAGCAT | 60         |              |
| Qy                    | 61           | GAGTGGGGTCATTTCACAGATATTAGTTCACACAGAGAAGCCAAATGGATCCCCAGTG     | 120        |              |
| Db                    | 61           | GAGTGGGGTCATTTCACAGATATTAGTTCACACAGAGAAGCCAAATGGATCCCCAGTG     | 120        |              |
| Qy                    | 121          | CACATATGGGACTGAGCTAACTCTTTTGTGATGGCCCTCTCTGCTCTCTGCTGCTGCTCTC  | 180        |              |
| Db                    | 121          | CACATATGGGACTGAGCTAACTCTCTTTGTGATGGCCCTCTCTGCTCTCTGCTGCTGCTCTC | 180        |              |
| Qy                    | 181          | TCGTGAAGATTCAAGCTTATTTCAATGAGACTGACAGCTGCCATGCCAATTTGCAAACTC   | 240        |              |
| Db                    | 181          | TCGTGAAGATTCAAGCTTATTTCAATGAGACTGACAGCTGCCATGCCAATTTGCAAACTC   | 240        |              |
| Qy                    | 241          | TCAAAACCAAAGCCTGAGTGAGCTAGTAGTATTTTGGCAGGACCAGGAAAACTTGTTCT    | 300        |              |
| Db                    | 241          | TCAAAACCAAAGCCTGAGTGAGCTAGTAGTATTTTGGCAGGACCAGGAAAACTTGTTCT    | 300        |              |
| Qy                    | 301          | GAATGAGGTATACCTTAGGCAAGAGAAATTTGACAGTGTTCATTCCAGTATATGGGCG     | 360        |              |
| Db                    | 301          | GAATGAGGTATACCTTAGGCAAGAGAAATTTGACAGTGTTCATTCCAGTATATGGGCG     | 360        |              |
| Qy                    | 361          | CACAACTTTTGATTCGGACAGTTGGACCTCAGACTTCACAATCTTCAGATCAAGGACAA    | 420        |              |
| Db                    | 361          | CACAACTTTTGATTCGGACAGTTGGACCTCAGACTTCACAATCTTCAGATCAAGGACAA    | 420        |              |
| Qy                    | 421          | GGGCTTGATCAATGTATCATCCATCAAAAAGCCACACAGGAATGATTCGCATCCACCA     | 480        |              |
| Db                    | 421          | GGGCTTGATCAATGTATCATCCATCAAAAAGCCACACAGGAATGATTCGCATCCACCA     | 480        |              |
| Qy                    | 481          | GATGAATTCGAACCTGTCAGTGTCTGCTAACTTCAGTCAACCTTGAATAGTACCAATTC    | 540        |              |
| Db                    | 481          | GATGAATTCGAACCTGTCAGTGTCTGCTAACTTCAGTCAACCTTGAATAGTACCAATTC    | 540        |              |

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RESULT 2
US-09-837-867A-22
Sequence 22, Application US/09837867A
Patent No. US20020098542A1
GENERAL INFORMATION:
APPLICANT: Sharpe, Arlene H.
APPLICANT: Borriello, Francescopaulo
APPLICANT: Freeman, Gordon J.
APPLICANT: Nadler, Lee M.
TITLE OF INVENTION: No. US20020098542A1el Forms of T Cell Costimulatory
TITLE OF INVENTION: Molecules and Uses Therefor
FILE REFERENCE: BWI-120CPADV
CURRENT APPLICATION NUMBER: US/09/837,867A
CURRENT FILING DATE: 2001-04-17
PRIOR APPLICATION NUMBER: 08/205,697
PRIOR FILING DATE: 1994-03-02
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 22
LENGTH: 1120
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (107) ... (1093)
US-09-837-867A-22

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Query Match      100.0%; Score 1120; DB 9; Length 1120;
Best Local Similarity 100.0%; Pred. NC. 0;
Matches 1120; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qv      1  CACAGGCGTAAAGCTTTTCTCTCTGCTGTGTAACACAGGCACTAGCACAGACACACCGAT 60

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GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 20, 2004, 11:44:16 ; Search time 473.137 Seconds

(without alignments)  
10056.251 Million cell updates/sec

Title: US-09-962-969B-22

Perfect score: 1120

Sequence: 1 CACAGCGTGAAGCTTGGT.....AGAGTAAAGCCCAAAAAA 1120

Scoring table: IDENTITY NUC

Gapop 10\_0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : N Geneseq\_29Jan04:\*  
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2: geneseqn1990s:\*  
3: geneseqn2000s:\*  
4: geneseqn2001as:\*  
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6: geneseqn2002s:\*  
7: geneseqn2003as:\*  
8: geneseqn2003bs:\*  
9: geneseqn2003cs:\*  
10: geneseqn2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description         |
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| 2          | 1120  | 100.0       | 1120   | 2     | AAQ49181 Human B 1  |
| 3          | 1120  | 100.0       | 1120   | 2     | AAV55784 Human B7   |
| 4          | 1120  | 100.0       | 1120   | 3     | AAQ84049 Human B 1  |
| 5          | 1120  | 100.0       | 1120   | 6     | ABV72340 Nucleoid   |
| 6          | 1120  | 100.0       | 1120   | 6     | AAQ27968 Human B7   |
| 7          | 1120  | 100.0       | 1120   | 9     | AAQ60974 Human CD2  |
| 8          | 995.8 | 88.9        | 1424   | 3     | AAQ29321 Human B7   |
| 9          | 995.8 | 88.9        | 1424   | 6     | ABL64678 Stomach c  |
| 10         | 995.8 | 88.9        | 1424   | 6     | ABL63096 Breast ca  |
| 11         | 995.8 | 88.9        | 1424   | 6     | ABX84193 Human CDN  |
| 12         | 995.8 | 88.9        | 1424   | 9     | ADD25559 Binding d  |
| 13         | 995.8 | 88.9        | 1424   | 9     | AAQ85873 B70 type   |
| 14         | 995.8 | 88.9        | 2205   | 4     | AAH72616 Human cer  |
| 15         | 972   | 86.8        | 972    | 2     | AAV83208 Human CD2  |
| 16         | 972   | 86.8        | 972    | 6     | AAQ25510 Human co-  |
| 17         | 753.2 | 67.2        | 831    | 2     | AAV03330 DNA enco   |
| 18         | 723.4 | 64.6        | 738    | 2     | AAV80393 Human B7   |
| 19         | 723.4 | 64.6        | 738    | 4     | AAQ89731 Nucleoid   |
| 20         | 597   | 53.3        | 1897   | 2     | AAQ27914 Canine B7  |
| 21         | 597   | 53.3        | 1897   | 2     | AAQ27913 Canine B7  |
| 22         | 575.2 | 51.4        | 987    | 2     | AAQ27915 Canine B7  |
| 23         | 575.2 | 51.4        | 987    | 2     | AAQ27916 Complement |

|    |       |      |      |   |                     |
|----|-------|------|------|---|---------------------|
| 24 | 566.4 | 50.6 | 764  | 2 | AAQ62939 Chimeric   |
| 25 | 558.6 | 49.9 | 2830 | 2 | AAZ27929 Feline B7  |
| 26 | 558.6 | 49.9 | 2830 | 2 | AAZ27930 Feline B7  |
| 27 | 540   | 48.2 | 996  | 2 | AAZ27931 Feline B7  |
| 28 | 540   | 48.2 | 996  | 2 | AAZ27932 Complement |
| 29 | 533.2 | 47.6 | 1080 | 3 | AAZ34785 Cat CD86   |
| 30 | 533.2 | 47.6 | 1080 | 3 | AAZ34785 Feline CD  |
| 31 | 533.2 | 47.6 | 1080 | 6 | AAQ46840 Feline CD  |
| 32 | 533.2 | 47.6 | 1080 | 6 | ABK48230 cDNA enco  |
| 33 | 525   | 46.9 | 1050 | 3 | AAQ49661 Pig coeti  |
| 34 | 468.2 | 41.8 | 1795 | 2 | AAZ27922 Canine B7  |
| 35 | 468.2 | 41.8 | 1795 | 2 | AAZ27921 Canine B7  |
| 36 | 463.8 | 41.4 | 840  | 2 | AAZ27924 Complement |
| 37 | 463.8 | 41.4 | 840  | 2 | AAZ27923 Canine B7  |
| 38 | 411.2 | 36.7 | 430  | 3 | AAQ00427 Human sec  |
| 39 | 407.2 | 36.4 | 1151 | 2 | AAV55785 Mouse B7-  |
| 40 | 407.2 | 36.4 | 1163 | 2 | AAQ49182 Mouse B 1  |
| 41 | 407.2 | 36.4 | 1163 | 3 | AAQ84050 Murine B   |
| 42 | 405.6 | 36.2 | 1163 | 2 | AAQ81366 Murine B   |
| 43 | 397   | 35.4 | 403  | 2 | AAV89569 EST Clone  |
| 44 | 394   | 35.2 | 1261 | 2 | AAQ01046 Mouse B7-  |
| 45 | 369.2 | 33.0 | 942  | 2 | AAQ99926 Rat CD86   |

## ALIGNMENTS

RESULT 1  
AAQ81351  
ID AAQ81351 standard; cDNA; 1120 BP.  
XX  
AC AAQ81351;  
XX  
DT 25-MAR-2003 (revised)  
DT 20-AUG-1995 (first entry)  
XX  
DE Human B lymphocyte antigen B7-2 (hB7-2-clone 29).  
XX  
KW CTLA4/CD28; counter receptor; B lymphocyte antigen; B7-2; ss.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT CDS 107..1093  
FT /\*tag= a  
XX  
PN WO9503408-A1.  
XX  
PD 02-FEB-1995.  
XX  
PF 26-JUL-1994; 94WO-US008423.  
XX  
PR 26-JUL-1993; 93US-00101624.  
PR 19-AUG-1993; 93US-00109393.  
PR 03-NOV-1993; 93US-00147773.  
XX  
PA (DAND ) DANA FARBER CANCER INST INC.  
XX  
PI (REPK ) REPLIGEN CORP.  
XX  
PI Freeman GJ, Nadler LM, Gray GS, Greenfield E;  
XX  
XX WPI; 1995-075236/10.  
DR P-ESDB; AAR67984.  
XX  
PT Nucleic acids encoding CTLA4/CD28 counter receptor, B7-2 - useful for enhancing or suppressing T-cell mediated immune responses.  
XX  
PS Claim 4; Fig 8; 175pp; English.  
XX  
CC A cDNA library was constructed in the pCDM8 vector using poly A+ RNA from the human anti-IGM activated B cells. Four clones were strongly positive for B7-2 expression by indirect immunofluorescence using CTLA4Ig and flow cytometric analysis. The B7-2 cDNA insert in clone 29 was sequenced in





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OM nucleic - nucleic search, using sw model

Run on: March 20, 2004, 11:47:41 ; Search time 3206.43 Seconds

(without alignments)  
10430.790 Million cell updates/sec

Title: US-09-962-969B-22

Perfect score: 1120

Sequence: 1 CACAGGCTAAAGCTTTGCT.....AGAGTAAAGCCCAAAAAA 1120

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 27513289 seqs, 14931090276 residues

Total number of hits satisfying chosen parameters: 55026578

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

EST.\*

- 1: em\_estba.\*
- 2: em\_esthum.\*
- 3: em\_estin.\*
- 4: em\_estnu.\*
- 5: em\_estov.\*
- 6: em\_estpl.\*
- 7: em\_estro.\*
- 8: em\_htc.\*
- 9: gb\_est1.\*
- 10: gb\_est2.\*
- 11: gb\_htc.\*
- 12: gb\_est3.\*
- 13: gb\_est4.\*
- 14: gb\_est5.\*
- 15: em\_estfun.\*
- 16: em\_estom.\*
- 17: em\_gss\_hum.\*
- 18: em\_gss\_inv.\*
- 19: em\_gss\_pln.\*
- 20: em\_gss\_vrt.\*
- 21: em\_gss\_fun.\*
- 22: em\_gss\_man.\*
- 23: em\_gss\_mus.\*
- 24: em\_gss\_pro.\*
- 25: em\_gss\_rod.\*
- 26: em\_gss\_phg.\*
- 27: em\_gss\_vrl.\*
- 28: gb\_gss1.\*
- 29: gb\_gss2.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description        |
|------------|-------|-------------|--------|----|--------------------|
| 1          | 683   | 61.0        | 709    | 13 | BQ109553 imageqc 7 |
| 2          | 679.8 | 60.7        | 753    | 12 | BI906246 603063172 |
| 3          | 645   | 57.7        | 899    | 13 | BX396966 BX396966  |
| 4          | 598.5 | 53.4        | 655    | 12 | BI824940 603032554 |

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| C | 5  | 588.8 | 52.6 | 926  | 13 | BX371662 |
|   | 6  | 470.4 | 42.0 | 680  | 14 | CD688144 |
|   | 7  | 448.4 | 40.0 | 490  | 14 | CD698408 |
| C | 8  | 426.6 | 38.1 | 925  | 13 | BX351622 |
|   | 9  | 407.2 | 36.4 | 2541 | 11 | AK079513 |
|   | 10 | 400.8 | 35.8 | 496  | 10 | AW516826 |
|   | 11 | 377   | 33.7 | 595  | 14 | CD705810 |
|   | 12 | 350.4 | 31.3 | 658  | 14 | CB288199 |
|   | 13 | 325.4 | 29.1 | 347  | 10 | BG001664 |
|   | 14 | 323.6 | 28.9 | 675  | 13 | BY749883 |
|   | 15 | 316.4 | 28.2 | 629  | 10 | BB631711 |
|   | 16 | 311.4 | 27.8 | 1002 | 10 | BF137460 |
|   | 17 | 299.6 | 26.8 | 448  | 9  | AA056906 |
| C | 18 | 276.4 | 24.7 | 565  | 12 | BQ002799 |
|   | 19 | 268.2 | 23.9 | 543  | 10 | BF064222 |
|   | 20 | 259.8 | 23.2 | 578  | 12 | BM089797 |
| C | 21 | 258.4 | 23.1 | 570  | 9  | AI093604 |
|   | 22 | 250   | 22.3 | 576  | 14 | CD471494 |
|   | 23 | 245.2 | 21.9 | 736  | 29 | CE294610 |
| C | 24 | 243.6 | 21.8 | 580  | 14 | CB472621 |
| C | 25 | 233.8 | 20.9 | 580  | 14 | CB472663 |
| C | 26 | 227.6 | 20.3 | 654  | 10 | BB635605 |
|   | 27 | 224.2 | 20.0 | 504  | 9  | AA946810 |
| C | 28 | 222.2 | 19.8 | 418  | 14 | CD468511 |
|   | 29 | 211.2 | 18.9 | 345  | 29 | CG542494 |
|   | 30 | 205   | 18.3 | 220  | 14 | CD523014 |
|   | 31 | 192.4 | 17.2 | 380  | 14 | CB810508 |
| C | 32 | 178   | 15.9 | 512  | 9  | AA056905 |
| C | 33 | 175.6 | 15.7 | 374  | 13 | BY221563 |
|   | 34 | 174.8 | 15.6 | 377  | 13 | BY179845 |
| C | 35 | 172.2 | 15.4 | 480  | 9  | AI750143 |
|   | 36 | 172   | 15.4 | 690  | 13 | BQ109523 |
|   | 37 | 172   | 15.4 | 695  | 12 | BI767024 |
|   | 38 | 167.8 | 15.0 | 362  | 13 | BY203663 |
|   | 39 | 164   | 14.6 | 705  | 13 | BY764599 |
|   | 40 | 163.8 | 14.6 | 366  | 13 | BY221252 |
|   | 41 | 163.2 | 14.6 | 257  | 10 | AW427922 |
|   | 42 | 160.6 | 14.3 | 351  | 13 | BY163388 |
|   | 43 | 156.2 | 13.9 | 344  | 13 | BY175601 |
|   | 44 | 155.2 | 13.9 | 357  | 13 | BY187789 |
|   | 45 | 154.8 | 13.8 | 353  | 13 | BY193840 |

ALIGNMENTS

RESULT 1

BQ109553

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

BQ109553 imageqc 7 2001/snm58bdr81.y1 NIH\_MGC\_118 Homo sapiens cDNA clone  
IMAGE:5218562 5', mRNA sequence.

BQ109553.1 GI:20159207

EST.

Homo sapiens (human)

Homo sapiens

Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 709)

Kale,P.I., Harsch,T.J., Folta,P.A., Nelson,D.O., Sanders,C.G. and

Prange,C.K.

The I.M.A.G.E. Consortium quality control effort: clone

resequencing for verification

Unpublished (2001)

Contact: Prange CK

The I.M.A.G.E. Consortium

Lawrence Livermore National Laboratory

Livermore, CA, USA

Email: help@image.llnl.gov

This read has been produced as part of the I.M.A.G.E. Consortium  
quality control effort. High quality sequence is defined as having  
100 or more base pairs with a phred quality value of 20 or greater,  
where a sliding window of 4 base pairs with a phred quality value



[illegible]



CELL TYPE: B cell  
CELL LINE: Raji  
IMMEDIATE SOURCE:  
LIBRARY: cDNA in pCDMS vector  
CLONE: B7, Raji clone #13  
POSITION IN GENOME:  
CHROMOSOME/SEGMENT: 3  
FEATURE:  
NAME/KEY: Open reading frame (translated region)  
LOCATION: 318 to 1181 bp  
IDENTIFICATION METHOD: similarity to other pattern  
FEATURE:  
NAME/KEY: Alternate polyadenylation signal  
LOCATION: 1474 to 1479 bp  
IDENTIFICATION METHOD: similarity to other pattern  
PUBLICATION INFORMATION:  
AUTHORS: FREEMAN, GORDON J.  
AUTHORS: FREEDMAN, ARNOLD S.  
AUTHORS: SEGIL, JEFFREY M.  
AUTHORS: LEE, GRACE  
AUTHORS: WHITMAN, JAMES F.  
AUTHORS: NADLER, LEE W.  
TITLE: B7, A New Member Of The Ig Superfamily With  
TITLE: Unique Expression On Activated And Neoplast  
JOURNAL: The Journal of Immunology  
VOLUME: 143  
ISSUE: 8  
PAGES: 2714-2722  
DATE: 15-OCT-1989  
RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 1491  
IS-08-1147-772-1

| Query Match                | 100.0%; Score 1491; DB 2; Length 1491;                              |
|----------------------------|---|
| Best Local Similarity      | 100.0%; Pred. No. 0;  |
| Matches 1491; Conservative | 0; Mismatches 0; Indels 0; Gaps 0;                                  |
| Qy 1                       | CCAAAGAAAAGTGTATTTGTCATTGCTTTATAGACTGTAAAGAAGAGAATCTCAGAAGT 60      |
| Db 1                       | CCAAAGAAAAGTGTATTTGTCATTGCTTTATAGACTGTAAAGAAGAGAATCTCAGAAGT 60      |
| Qy 61                      | GGAGTCTTACCTGAAATCAAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCAGCAAGCT 120     |
| Db 61                      | GGAGTCTTACCTGAAATCAAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCAGCAAGCT 120     |
| Qy 121                     | GTGAAACTAAATCCACAACCTTTGGAGACCAGGAACAACCTTCCAAATCTGTGTGTTTT 180     |
| Db 121                     | GTGAAACTAAATCCACAACCTTTGGAGACCAGGAACAACCTTCCAAATCTGTGTGTTTT 180     |
| Qy 181                     | GTAAACATCACTGGAGGGTCTTACGTGAGCAATTGGATTGTCTATCAAGCCCTGCTGTT 240     |
| Db 181                     | GTAAACATCACTGGAGGGTCTTACGTGAGCAATTGGATTGTCTATCAAGCCCTGCTGTT 240     |
| Qy 241                     | TTGCACCTTGGGAAGTGCCTGGTCTTACTTGGGTCCAAATTTGTTGGCTTTCACTTTTCAC 300   |
| Db 241                     | TTGCACCTTGGGAAGTGCCTGGTCTTACTTGGGTCCAAATTTGTTGGCTTTCACTTTTCAC 300   |
| Qy 301                     | CCTAAGCATCTGAAGCCATGGGCCACACACGGAGCAGGGAGACATCACCATCCAAGTCTC 360    |
| Db 301                     | CCTAAGCATCTGAAGCCATGGGCCACACACGGAGCAGGGAGACATCACCATCCAAGTCTC 360    |
| Qy 361                     | CATACCTGAAATTTCTTTTCAGACTCTTGGTGCTGGCTGGTCTTTCTCACTTCTGTTCAAGTG 420 |
| Db 361                     | CATACCTGAAATTTCTTTTCAGACTCTTGGTGCTGGCTGGTCTTTCTCACTTCTGTTCAAGTG 420 |
| Qy 421                     | TTATCCACGTGACCAAGGAAGTGAAGAAGTGGCAACCGCTGTCGTGGTCAAAATGTTTT 480     |
| Db 421                     | TTATCCACGTGACCAAGGAAGTGAAGAAGTGGCAACCGCTGTCGTGGTCAAAATGTTTT 480     |
| Qy 481                     | CTGTTGAAGAGCTGGCAAAACTCCGACTACTGGCCAAAAGAGAGAAAATGGTGCTCGA 540      |
| Db 481                     | CTGTTGAAGAGCTGGCAAAACTCCGACTACTGGCCAAAAGAGAGAAAATGGTGCTCGA 540      |
| Qy 541                     | CTATGATGTCCTGGGACATGAATATATGSCCCGAGTACAAGAACCGGACCACTTTTGATA 600    |

## RESULT 2

RESULT 2  
US-08-456-104-5

US-08-456-104-5  
: Sequence 5. Application US/08456104

Sequence 5, Application  
Patent No. 5861310

Patent No. 5861310  
GENERAL INFORMATION:

APPLICANT: Freeman, Gordon J.

APPLICANT: Freeman, Gordon  
APPLICANT: Nadler, Lee M.

;  
; APPLICANT: Nadler, Lee M.  
; APPLICANT: Grav. Gary S.

APPLICANT: Gray, Gary S.  
TITLE OF INVENTION: TUMOR CELLS MODIFIED TO EXPRESS B7-2 AND B7-3 WITH INCREASED

|    |      |   |      |
|----|------|---|------|
| Db | 541  | CTATGATGTCGGGAGATGAATATATGCGCCGAGTACAAGAACCGGACCACTTTGATA     | 600  |
| Qy | 601  | TCACTAATAACCTCTCCATTTGATCTCTGGCTCTGGCCCATCTGTACGAGGGCACATCG   | 660  |
| Db | 601  | TCACTAATAACCTCTCCATTTGATCTCTGGCTCTGGCCCATCTGTACGAGGGCACATCG   | 660  |
| Qy | 661  | ACTGTGCTTCTCGAAGTAAAGAAAGACGCTTTCAAGCGGGAACACCTCGGCTGAAGTGA   | 720  |
| Db | 661  | ACTGTGCTTCTCGAAGTAAAGAAAGACGCTTTCAAGCGGGAACACCTCGGCTGAAGTGA   | 720  |
| Qy | 721  | CGTTTACGTCAAAGCTGACTCCCTPACACCTAGTATATCTGTACTTTGAAATCCAACTT   | 780  |
| Db | 721  | CGTTTACGTCAAAGCTGACTCCCTPACACCTAGTATATCTGTACTTTGAAATCCAACTT   | 780  |
| Qy | 781  | CTAAATATTAGAAGGATAAATTTGCTCAACCTCTGGAGTTTTCAGAGCCTCACCTCTCCT  | 840  |
| Db | 781  | CTAAATATTAGAAGGATAAATTTGCTCAACCTCTGGAGTTTTCAGAGCCTCACCTCTCCT  | 840  |
| Qy | 841  | GGTTGAAAATGGAGAAGAAATTAATTCGCAACAACAAGTTTCCCAAGATCCTGAAA      | 900  |
| Db | 841  | GGTTGAAAATGGAGAAGAAATTAATTCGCAACAACAAGTTTCCCAAGATCCTGAAA      | 900  |
| Qy | 901  | CTGAGCTCTATGCTGTTTAGCAGCAAACTGGATTTCAATATGACAAACAACACAGCTTCA  | 960  |
| Db | 901  | CTGAGCTCTATGCTGTTTAGCAGCAAACTGGATTTCAATATGACAAACAACACAGCTTCA  | 960  |
| Qy | 961  | TGTGTCCTCAAGTATGCACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA    | 1020 |
| Db | 961  | TGTGTCCTCAAGTATGCACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAACCA    | 1020 |
| Qy | 1021 | AGCNAGCAGATTTCCGTGATTAACCTGCTCCCATCTCGGGCATTACTCTTAATCTCAGTAA | 1080 |
| Db | 1021 | AGCNAGCAGATTTCCGTGATTAACCTGCTCCCATCTCGGGCATTACTCTTAATCTCAGTAA | 1080 |
| Qy | 1081 | ATGGAAATTTTGTGATATGCTGCTCACTACCTACCTGCTTTGCCCAAGATCAGAGAGAA   | 1140 |
| Db | 1081 | ATGGAAATTTTGTGATATGCTGCTCACTACCTACCTGCTTTGCCCAAGATCAGAGAGAA   | 1140 |
| Qy | 1141 | GGAGGAATGAGAGATTGAGAGGGAAGTGTACGCCCTGTATAACAGTGTCCCGAGAAGC    | 1200 |
| Db | 1141 | GGAGGAATGAGAGATTGAGAGGGAAGTGTACGCCCTGTATAACAGTGTCCCGAGAAGC    | 1200 |
| Qy | 1201 | AAGGGGCTGAAAAGATCTGAAGGTAGCCCTCGTCACTCTTCTGGGATACATGGATCGTG   | 1260 |
| Db | 1201 | AAGGGGCTGAAAAGATCTGAAGGTAGCCCTCGTCACTCTTCTGGGATACATGGATCGTG   | 1260 |
| Qy | 1261 | GGGATCATGAGGATTTCTCCCTTACAAATTTAAGCTGTTTTACCCACATCCTCACCTT    | 1320 |
| Db | 1261 | GGGATCATGAGGATTTCTCCCTTACAAATTTAAGCTGTTTTACCCACATCCTCACCTT    | 1320 |
| Qy | 1321 | CTTAAAAACCTCTTTTCCAGATTAAGCTGAACAGTTCACAAGTGTGCTGGCATCCTCCTT  | 1380 |
| Db | 1321 | CTTAAAAACCTCTTTTCCAGATTAAGCTGAACAGTTCACAAGTGTGCTGGCATCCTCCTT  | 1380 |
| Qy | 1381 | TCCTCCCATATGCAATTTGCTTAATGTACCTCTTCTTTTGCCATGTTTCCATTTCTGCCA  | 1440 |
| Db | 1381 | TCCTCCCATATGCAATTTGCTTAATGTACCTCTTCTTTTGCCATGTTTCCATTTCTGCCA  | 1440 |
| Qy | 1441 | TCCTGAATTTGCTTTGTGAGCAATTCATTAATCTATTAAACACTAATTTGAG          | 1491 |
| Db | 1441 | TCCTGAATTTGCTTTGTGAGCAATTCATTAATCTATTAAACACTAATTTGAG          | 1491 |

## RESULT. T. 2

RESULT 2  
US-08-456-104-5

US-08-456-104-5  
: Sequence 5: Application US/08456104

; Sequence 5, Application US/08456104  
: Patent No. 5861310

Patent No. 5861310  
GENERAL INFORMATION:

; GENERAL INFORMATION:  
; APPLICANT: Freeman, Gordon J.

APPLICANT: Freeman, Gordon J.  
APPLICANT: Nadler, Lee M.

APPLICANT: Nadler, Lee M.  
APPLICANT: Gray, Gary S.

APPLICANT: Gray, Gary S.  
TITLE OF INVENTION: TUMOR CELLS MODIFIED TO EXPRESS B7-2 AND B7-

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: March 20, 2004, 12:25:16 ; Search time 116.493 Seconds  
(without alignments)  
7102.827 Million cell updates/sec

Title: US-09-962-969B-18  
Perfect score: 1491  
Sequence: 1 CCAAGAAAAGTGATTGT.....CTATTAACTATTGAG 1491

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA: \*  
1: /cgn2\_6/ptodata/2/ina/5A.COMB.seq: \*  
2: /cgn2\_6/ptodata/2/ina/5B.COMB.seq: \*  
3: /cgn2\_6/ptodata/2/ina/6A.COMB.seq: \*  
4: /cgn2\_6/ptodata/2/ina/6B.COMB.seq: \*  
5: /cgn2\_6/ptodata/2/ina/ECTUS.COMB.seq: \*  
6: /cgn2\_6/ptodata/2/ina/backfiles1.seq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score  | Query Match | Length | DB ID | Description                          |
|------------|--------|-------------|--------|-------|--------------------------------------|
| 1          | 1491   | 100.0       | 1491   | 2     | US-08-147-772-1 Sequence 1, Appl     |
| 2          | 1491   | 100.0       | 1491   | 2     | US-08-456-104-5 Sequence 5, Appl     |
| 3          | 1491   | 100.0       | 1491   | 2     | US-08-101-624-22 Sequence 22, Appl   |
| 4          | 1491   | 100.0       | 1491   | 3     | US-08-153-262-1 Sequence 1, Appl     |
| 5          | 1491   | 100.0       | 1491   | 3     | US-08-479-744A-28 Sequence 28, Appl  |
| 6          | 1491   | 100.0       | 1491   | 3     | US-08-280-757B-28 Sequence 28, Appl  |
| 7          | 1491   | 100.0       | 1491   | 3     | US-09-159-135-1 Sequence 1, Appl     |
| 8          | 1491   | 100.0       | 1491   | 3     | US-09-205-697A-18 Sequence 18, Appl  |
| 9          | 1491   | 100.0       | 1491   | 3     | US-08-702-525-18 Sequence 18, Appl   |
| 10         | 1491   | 100.0       | 1491   | 4     | US-09-450-798-1 Sequence 1, Appl     |
| 11         | 1491   | 100.0       | 1491   | 4     | US-08-403-253A-1 Sequence 1, Appl    |
| 12         | 1491   | 100.0       | 1491   | 4     | US-08-435-816A-1 Sequence 1, Appl    |
| 13         | 1491   | 100.0       | 1491   | 4     | US-09-425-762-28 Sequence 28, Appl   |
| 14         | 1491   | 100.0       | 1491   | 4     | US-09-837-867A-18 Sequence 18, Appl  |
| 15         | 1491   | 100.0       | 1491   | 4     | US-08-453-386A-1 Sequence 1, Appl    |
| 16         | 1491   | 100.0       | 1491   | 5     | PCT-US95-02576-18 Sequence 18, Appl  |
| 17         | 1489.4 | 99.9        | 1491   | 2     | US-07-751-767A-5 Sequence 5, Appl    |
| 18         | 1489.4 | 99.9        | 1491   | 4     | US-09-326-186B-225 Sequence 225, App |
| 19         | 868.2  | 58.2        | 879    | 3     | US-09-039-982A-31 Sequence 31, Appl  |
| 20         | 868.2  | 58.2        | 879    | 3     | US-09-039-641-31 Sequence 31, Appl   |
| 21         | 868.2  | 58.2        | 879    | 3     | US-09-039-762A-31 Sequence 31, Appl  |
| 22         | 868.2  | 58.2        | 879    | 4     | US-09-042-492D-31 Sequence 31, Appl  |
| 23         | 868.2  | 58.2        | 879    | 4     | US-08-913-612A-31 Sequence 31, Appl  |
| 24         | 865.4  | 58.0        | 867    | 2     | US-08-184-009-207 Sequence 207, App  |
| 25         | 865.4  | 58.0        | 867    | 2     | US-08-458-356-207 Sequence 207, App  |
| 26         | 865.4  | 58.0        | 867    | 3     | US-08-460-736-207 Sequence 207, App  |
| 27         | 865.4  | 58.0        | 867    | 4     | US-09-495-052-59 Sequence 59, Appl   |

Sequence 207, App  
Sequence 2, Appl  
Sequence 60, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 32, Appl  
Sequence 130, App  
Sequence 3, Appl  
Sequence 1, Appl  
Sequence 3, Appl  
Sequence 61, Appl  
Sequence 35, Appl  
Sequence 35, Appl  
Sequence 35, Appl  
Sequence 35, Appl  
Sequence 27, Appl

28 865.4 58.0 867 4 US-09-535-370-207  
29 863.8 57.9 867 3 US-08-812-948A-2  
30 820.6 55.0 867 4 US-09-495-052-60  
31 727.2 48.8 738 3 US-09-039-982A-32  
32 727.2 48.8 738 3 US-09-039-641-32  
33 727.2 48.8 738 3 US-09-039-762A-32  
34 727.2 48.8 738 4 US-09-042-492D-32  
35 727.2 48.8 738 4 US-08-913-612A-32  
36 726.6 48.7 1446 3 US-09-471-945-130  
37 721.2 48.4 1428 3 US-08-812-948A-3  
38 465.2 31.2 941 4 US-09-303-040-1  
39 452.8 30.4 879 4 US-09-303-040-3  
40 416.4 27.9 900 4 US-09-495-052-61  
41 416 27.9 416 3 US-08-205-697A-35  
42 416 27.9 416 3 US-08-702-525-35  
43 416 27.9 416 4 US-09-837-867A-35  
44 416 27.9 416 5 PCT-US95-02576-35  
45 379 25.4 379 3 US-08-205-697A-27

ALIGNMENTS

RESULT 1  
US-08-147-772-1  
; Sequence 1, Application US/08147772  
; Patent No. 5858776  
; GENERAL INFORMATION:  
; APPLICANT: Ostrand-Rosenberg, Suzanne  
; APPLICANT: Bakkar, Sivasubramanian  
; APPLICANT: Glimcher, Laurie H.  
; APPLICANT: Freeman, Gordon J.  
; APPLICANT: Nadler, Lee M.  
; TITLE OF INVENTION: Tumor Cells With Increased Immunogenicity  
; NUMBER OF SEQUENCES: 4  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: LAHIVE & COCKFIELD  
; STREET: 60 State Street, Suite 510  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/147,772  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mandragouras, Amy E.  
; REGISTRATION NUMBER: 36,207  
; REFERENCE/DOCKET NUMBER: RPI-003  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (617) 227-7400  
; TELEFAX: (617) 227-5941  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1491 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: double  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA to mRNA  
; HYPOTHETICAL: no  
; ANTI-SENSE: no  
; ORIGINAL SOURCE:  
; ORGANISM: Homo sapien  
; TISSUE TYPE: lymphoid

|    |   |    |      |  |      |
|----|---|----|------|--|------|
| 1  | APPLICATION NUMBER: US 07/864,805                             | Qy | 61   | GGAGTCTTACCTGAAATCAAGGATTTAAAGAAAAGTGGAAATTTTCTTTCAGCAAGCT   | 120  |
| 2  | FILING DATE: 7-APR-1992                                       | Db | 61   | GGAGTCTTACCTGAAATCAAGGATTTAAAGAAAAGTGGAAATTTTCTTTCAGCAAGCT   | 120  |
| 3  | APPLICATION NUMBER: US 08/247,505                             | Qy | 121  | GTGAAACTAAATCCCAACCTTTGGAGACCCAGGAAACACCTCCCAATCTCTGTGTGTTTT | 180  |
| 4  | FILING DATE: 23-MAY-1994                                      | Db | 121  | GTGAAACTAAATCCCAACCTTTGGAGACCCAGGAAACACCTCCCAATCTCTGTGTGTTTT | 180  |
| 5  | APPLICATION NUMBER: US 07/864,866                             | Qy | 181  | GTAACATCACTGGAGGGTCTTCTAGCTGAGCAATGGGATTTGATCATCAGCCCTGCTGTT | 240  |
| 6  | FILING DATE: 7-APR-1992                                       | Db | 181  | GTAACATCACTGGAGGGTCTTCTAGCTGAGCAATGGGATTTGATCATCAGCCCTGCTGTT | 240  |
| 7  | APPLICATION NUMBER: US 08/218,155                             | Qy | 241  | TTGCACCTGGGAAGTCCCTGCTTCTTTCAGCTCTTGGTCCAAATTTGCTTTCCTTTCAG  | 300  |
| 8  | FILING DATE: 25-MAR-1994                                      | Db | 241  | TTGCACCTGGGAAGTCCCTGCTTCTTTCAGCTCTTGGTCCAAATTTGCTTTCCTTTCAG  | 300  |
| 9  | APPLICATION NUMBER: US 07/864,907                             | Qy | 301  | CCTAAGCATCTGAAGCCATGGGCCACACACGAGGAGGAGGAAACATCACCATCAAGTGTG | 360  |
| 10 | FILING DATE: 7-APR-1992                                       | Db | 301  | CCTAAGCATCTGAAGCCATGGGCCACACACGAGGAGGAGGAAACATCACCATCAAGTGTG | 360  |
| 11 | APPLICATION NUMBER: US 07/902,467                             | Qy | 361  | CATACCTGGAATTTCTTTCAGCTCTTGGTCTGGTCTTCTTCTCACTTCTGTTCAGGTG   | 420  |
| 12 | FILING DATE: 16-JUNE-1992                                     | Db | 361  | CATACCTGGAATTTCTTTCAGCTCTTGGTCTGGTCTTCTTCTCACTTCTGTTCAGGTG   | 420  |
| 13 | APPLICATION NUMBER: US 07/275,433                             | Qy | 421  | TTATCCACGTCACCAAGGAAGTGAAGAAAGTGGCAACCGCTGTCCTGTGTCTCAATGTTT | 480  |
| 14 | FILING DATE: 23-NOV-1988                                      | Db | 421  | TTATCCACGTCACCAAGGAAGTGAAGAAAGTGGCAACCGCTGTCCTGTGTCTCAATGTTT | 480  |
| 15 | ATTORNEY/AGENT INFORMATION:                                   | Qy | 481  | CTGTTGAAGAGCTGGCACAACCTCGCATCTACTGCGCAAGAGGAGGAGGAAATGGTCTGA | 540  |
| 16 | NAME: Mandragouras, Amy E.                                    | Db | 481  | CTGTTGAAGAGCTGGCACAACCTCGCATCTACTGCGCAAGAGGAGGAGGAAATGGTCTGA | 540  |
| 17 | REGISTRATION NUMBER: 36,207                                   | Qy | 541  | CTATGATGTCGGGACATGAATATATATGCGCGGAGTACAAGAACCGGACCATCTTTGATA | 600  |
| 18 | REFERENCE/DOCKET NUMBER: RPI-002CP4                           | Db | 541  | CTATGATGTCGGGACATGAATATATATGCGCGGAGTACAAGAACCGGACCATCTTTGATA | 600  |
| 19 | TELEPHONE: (617) 227-7400                                     | Qy | 601  | TCATAATTAACCTCTCCATTTGATCCTGGCTCTGGCCCATCTGACGAGGGACATACG    | 660  |
| 20 | TELEFAX: (617) 227-5941                                       | Db | 601  | TCATAATTAACCTCTCCATTTGATCCTGGCTCTGGCCCATCTGACGAGGGACATACG    | 660  |
| 21 | INFORMATION FOR SEQ ID NO: 1:                                 | Qy | 661  | AGTGTGTTGTTCTGAAGTATGAAAAGAGCGCTTTCAAGCGGAAACACCTGGCTGAAGTGA | 720  |
| 22 | SEQUENCE CHARACTERISTICS:                                     | Db | 661  | AGTGTGTTGTTCTGAAGTATGAAAAGAGCGCTTTCAAGCGGAAACACCTGGCTGAAGTGA | 720  |
| 23 | LENGTH: 1491 base pairs                                       | Qy | 721  | CGTTATCAGTCAAAGCTGATCCCTPACACCTAGTATATCTGACTTTGAAATCCAACTT   | 780  |
| 24 | TYPE: nucleic acid  | Db | 721  | CGTTATCAGTCAAAGCTGATCCCTPACACCTAGTATATCTGACTTTGAAATCCAACTT   | 780  |
| 25 | STRANDEDNESS: double  | Qy | 781  | CTAATATTAGAGGATAAATTTGCTCAACCTCTGGAGTTTTCAGAGCCCTCACCTCTCT   | 840  |
| 26 | TOPOLOGY: linear  | Db | 781  | CTAATATTAGAGGATAAATTTGCTCAACCTCTGGAGTTTTCAGAGCCCTCACCTCTCT   | 840  |
| 27 | MOLECULE TYPE: cDNA to mRNA                                   | Qy | 841  | GGTTGGAATATGGAGAAAGTAAATGCCATCAACACACACAGTTTCCCAAGATCCCTGAAA | 900  |
| 28 | HYPOTHETICAL: no  | Db | 841  | GGTTGGAATATGGAGAAAGTAAATGCCATCAACACACACAGTTTCCCAAGATCCCTGAAA | 900  |
| 29 | ANTI-SENSE: no  | Qy | 901  | CTGAGCTCTATGCTGTAGCAGCAACTGGATTTCAATATGACCAACCAACCAAGTTCA    | 960  |
| 30 | ORGANISM: Homo sapien   | Db | 901  | CTGAGCTCTATGCTGTAGCAGCAACTGGATTTCAATATGACCAACCAACCAAGTTCA    | 960  |
| 31 | TISSUE TYPE: lymphoid   | Qy | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCACTGGAATACACCA   | 1020 |
| 32 | CELL TYPE: B Cell   | Db | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCACTGGAATACACCA   | 1020 |
| 33 | CELL LINE: Raji   | Qy | 1021 | AGCAAGAGCATTTTCTGATTAACCTGCTCCATCTCTGGGCCATTTACCTTAATCTAGTAA | 1080 |
| 34 | IMMEDIATE SOURCE:   | Db | 1021 | AGCAAGAGCATTTTCTGATTAACCTGCTCCATCTCTGGGCCATTTACCTTAATCTAGTAA | 1080 |
| 35 | LIBRARY: cDNA in pCDM8 vector                                 | Qy | 1081 | ATGGAATTTTGTGATGCTGCTGACCTACTGCTTTTCCCAAGATGCAGAGAGGAA       | 1140 |
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| 37 | POSITION IN GENOME:   | Qy | 1141 | GGAGGAATGAGAGATTGAGAGGGAAGTGTACGCCCTGTATTAACAGTGTCCGAGAGC    | 1200 |
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| 44 | NAME/KEY: Alternate polyadenylation signal                    |    |      |  |      |
| 45 | LOCATION: 1474 to 1479 bp                                     |    |      |  |      |
| 46 | IDENTIFICATION METHOD: similarity to other pattern            |    |      |  |      |
| 47 | PUBLICATION INFORMATION:                                      |    |      |  |      |
| 48 | AUTHORS: FREEMAN, GORDON J.                                   |    |      |  |      |
| 49 | AUTHORS: FREEDMAN, ARNOLD S.                                  |    |      |  |      |
| 50 | AUTHORS: SEGIL, JEFFREY M.                                    |    |      |  |      |
| 51 | AUTHORS: LEE, GRACE   |    |      |  |      |
| 52 | AUTHORS: WHITMAN, JAMES F.                                    |    |      |  |      |
| 53 | AUTHORS: NADLER, LEE M.                                       |    |      |  |      |
| 54 | TITLE: B7, A New Member Of The Ig Superfamily With            |    |      |  |      |
| 55 | TITLE: Unique Expression On Activated And Neoplastic B Cells  |    |      |  |      |
| 56 | JOURNAL: The Journal of Immunology                            |    |      |  |      |
| 57 | VOLUME: 143   |    |      |  |      |
| 58 | ISSUE: 8  |    |      |  |      |
| 59 | PAGES: 2714-2722  |    |      |  |      |
| 60 | DATE: 15-OCT-1989   |    |      |  |      |
| 61 | RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 1491             |    |      |  |      |
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| 63 | Query Match 100.0%; Score 1491; DB 8; Length 1491;            |    |      |  |      |
| 64 | Best Local Similarity 100.0%; Pred. No. 0;                    |    |      |  |      |
| 65 | Matches 1491; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |    |      |  |      |
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| 67 | Db 1 CCAAGAAAAGTGTGCTTATAGACTGTAAAGAGAACATCTCAGAGT 60         |    |      |  |      |

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OM nucleic - nucleic search, using sw model

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(without alignments)  
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Title: US-09-962-969B-18

Perfect score: 1491

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Scoring table: IDENTITY\_NUC

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Searched: 2438257 seqs, 184957644 residues

Total number of hits satisfying chosen parameters: 4876514

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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Sequence 24, Appl  
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#### ALIGNMENTS

RESULT 1  
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; Sequence 1, Application US/08592711  
; Publication No. US20020115214A1  
; GENERAL INFORMATION:  
; APPLICANT: June, Carl H.  
; APPLICANT: Thompson, Craig B.  
; APPLICANT: Nabel, Gary J.  
; APPLICANT: Gray, Gary S.  
; APPLICANT: Renner, Paul D.  
; TITLE OF INVENTION: Methods For Selectively Stimulating Proliferation Of T-Cells  
; NUMBER OF SEQUENCES: 14  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: LAHIVE & COCKFIELD  
; STREET: 60 State Street  
; CITY: Boston  
; STATE: Massachusetts  
; COUNTRY: USA  
; ZIP: 02109  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/592,711  
; FILING DATE: 26-JAN-1996  
; PRIOR APPLICATION NUMBER: US 08/435,816  
; APPLICATION NUMBER: US 08/435,816  
; FILING DATE: 4-MAY-1995  
; APPLICATION NUMBER: US 08/403,253  
; FILING DATE: 10-MARCH-1995  
; APPLICATION NUMBER: US 08/253,964  
; FILING DATE: 3-JUNE-1994  
; APPLICATION NUMBER: US 08/073,223  
; FILING DATE: 4-JUNE-1993  
; APPLICATION NUMBER: US 08/200,947  
; FILING DATE: 23-FEB-1994





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AUTHORS
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Lu,G., Cheng,Z. and Han,Z.
Homo sapiens cDNA DCB clones
Unpublished (2000)
Contact: Zequang Han
Chinese National Human Genome Center at Shanghai
351 Guo Shoujing Road, Zhangjiang Hi-Tech Park, Pudong, Shanghai
201203, P. R. China
Tel: 86-21-50801919 (ex.45)
Fax: 86-21-50801922
Email: hanzg@chgc.sh.cn
This clone is available at CHGC in Shanghai.
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GenCore version 5.1.6  
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Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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- 1: em\_estba:\*
  - 2: em\_esthum:\*
  - 3: em\_estin:\*
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  - 6: em\_estpl:\*
  - 7: em\_estro:\*
  - 8: em\_hic:\*
  - 9: gb\_est1:\*
  - 10: gb\_est2:\*
  - 11: gb\_hic:\*
  - 12: gb\_est3:\*
  - 13: gb\_est4:\*
  - 14: gb\_est5:\*
  - 15: em\_estfun:\*
  - 16: em\_estom:\*
  - 17: em\_gss\_hum:\*
  - 18: em\_gss\_inv:\*
  - 19: em\_gss\_pln:\*
  - 20: em\_gss\_vrt:\*
  - 21: em\_gss\_fun:\*
  - 22: em\_gss\_man:\*
  - 23: em\_gss\_mus:\*
  - 24: em\_gss\_pro:\*
  - 25: em\_gss\_rtd:\*
  - 26: em\_gss\_pug:\*
  - 27: em\_gss\_vrl:\*
  - 28: gb\_gss1:\*
  - 29: gb\_gss2:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description        |
|------------|-------|-------------|--------|----|--------------------|
| 1          | 640.8 | 43.0        | 713    | 12 | BI822963 603040428 |
| 2          | 563.4 | 37.8        | 566    | 9  | AV717312           |
| 3          | 561.8 | 37.7        | 567    | 9  | AV716442           |
| 4          | 522   | 35.0        | 814    | 13 | BU943171           |

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| C | 5  | 479.8 | 32.2 | 662  | 14 | CD366279 |
| C | 6  | 380   | 25.5 | 403  | 9  | AA983817 |
|   | 7  | 356.4 | 23.9 | 446  | 10 | AW292185 |
|   | 8  | 356.4 | 23.9 | 452  | 10 | BF475313 |
|   | 9  | 356.4 | 23.9 | 531  | 10 | AW290909 |
|   | 10 | 260   | 17.4 | 310  | 10 | AW370828 |
| C | 11 | 258.4 | 17.3 | 292  | 10 | BE926225 |
|   | 12 | 238.4 | 16.0 | 644  | 10 | BF039039 |
| C | 13 | 176.2 | 11.8 | 488  | 28 | AQ002500 |
|   | 14 | 134.6 | 9.0  | 393  | 29 | CG643015 |
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|   | 16 | 124.2 | 8.3  | 312  | 29 | CG555852 |
|   | 17 | 124   | 8.3  | 326  | 29 | CG525244 |
|   | 18 | 123   | 8.2  | 497  | 29 | CG602166 |
|   | 19 | 119.2 | 8.0  | 323  | 29 | CG505596 |
|   | 20 | 117.8 | 7.9  | 331  | 29 | CG533276 |
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|   | 27 | 47.2  | 3.2  | 830  | 29 | CNS017LH |
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| C | 30 | 42    | 2.8  | 1201 | 13 | EX461707 |
|   | 31 | 41.8  | 2.8  | 774  | 13 | BU205766 |
| C | 32 | 41.8  | 2.8  | 1201 | 9  | AL548304 |
|   | 33 | 41.2  | 2.8  | 559  | 13 | CA053666 |
|   | 34 | 41.2  | 2.8  | 764  | 13 | CA084499 |
|   | 35 | 41    | 2.7  | 859  | 29 | CNS00KLL |
| C | 36 | 40.2  | 2.7  | 932  | 28 | AZ693068 |
|   | 37 | 40    | 2.7  | 1101 | 29 | CNS0106X |
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|   | 39 | 39.8  | 2.7  | 1201 | 13 | EX358323 |
|   | 40 | 39.6  | 2.7  | 814  | 28 | BZ90183  |
|   | 41 | 39.4  | 2.6  | 666  | 29 | AG034096 |
|   | 42 | 39.4  | 2.6  | 1101 | 29 | CNS01088 |
|   | 43 | 39.4  | 2.6  | 1201 | 13 | EX381961 |
| C | 44 | 39.2  | 2.6  | 562  | 28 | BZ941226 |
|   | 45 | 39    | 2.6  | 799  | 28 | BZ667347 |

ALIGNMENTS

RESULT 1  
BI822963  
LOCUS 603040428F1 NIH\_MGC\_115 Homo sapiens cDNA clone IMAGE:5181343 5',  
DEFINITION mRNA sequence.  
ACCESSION BI822963  
VERSION BI822963.1 GI:15934513  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  
REFERENCE 1 (bases 1 to 713)  
AUTHORS NIH-MGC <http://mgs.nci.nih.gov/>.  
JOURNAL National Institutes of Health, Mammalian Gene Collection (MGC)  
COMMENT Unpublished (1999)  
Contact: Robert Strausberg, Ph.D.  
Email: [cgapbs-remail.nih.gov](mailto:cgapbs-remail.nih.gov)  
Tissue Procurement: Life Technologies, Inc.  
cDNA Library Preparation: Life Technologies, Inc.  
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)  
DNA Sequencing by: Incyte Genomics, Inc.  
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://imgc.llnl.gov>  
Plate: LLAM1452 row: g column: 08  
High quality sequence stop: 711.

Db 1381 TCTCCCATATGCAATTGCTTAATGTAACCTCTCTCTTTGGCATGTTTCCATTCTGCCA 1440  
QY 1441 TCTTGAATTGCTTGTGACGCCAATTCATTATCTATTATAAACACTAATTGAG 1491  
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Search completed: March 20, 2004, 18:14:16  
Job time : 6059.8 secs

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RESULT 15  
A37283  
LOCUS A37283 1491 bp DNA linear PAT 05-MAR-1997  
DEFINITION Sequence 23 from Patent WO9404196.  
ACCESSION A37283  
VERSION A37283.1 GI:2294380  
KEYWORDS unidentified  
SOURCE unclassified  
ORGANISM unclassified  
REFERENCE 1 (bases 1 to 1491)  
AUTHORS Vile, R.G. and Hart, I.R.  
TITLE TUMOUR THERAPY  
JOURNAL Patent: WO 9404196-A 23 03-MAR-1994;  
IMP CANCER RES TECH (GB)  
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Location/Qualifiers  
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ORIGIN  
Query Match 99.9%; Score 1489.4; DB 6; Length 1491;  
Best Local Similarity 99.9%; Pred. No. 0;  
Matches 1490; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
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|----------------------------|--|--|------|--------|-----------------|
| QY                         | 1081   | ATGGAAATTTTGTGATATGCTGCTGACCTACTGCTTTGCCCGCAGAGAGAA            | 1141 |        |                 |
| Db                         | 1081   | ATGGAAATTTTGTGATATGCTGCTGACCTACTGCTTTGCCCGCAGAGAGAA            | 1140 |        |                 |
| QY                         | 1141   | GGAGGAATGAGAGATTGAGAAAGGAGGAGAGTGTACCGCTGTATACAGTGTCCGAGAGC    | 1200 |        |                 |
| Db                         | 1141   | GGAGGAATGAGAGATTGAGAAAGGAGGAGTGTACCGCTGTATACAGTGTCCGAGAGC      | 1200 |        |                 |
| QY                         | 1201   | AAGGGGCTGAAAAGATCTGAAAGGTAGGCTTCGGTCACTCTCTCTGGGATACATGGATCGTG | 1260 |        |                 |
| Db                         | 1201   | AAGGGGCTGAAAAGATCTGAAAGGTAGGCTTCGGTCACTCTCTCTGGGATACATGGATCGTG | 1260 |        |                 |
| QY                         | 1261   | GGGATCATGAGGCATCTTCCCTCTAAACAAATTTAAAGCTGTTTTACCACCTACCTCACCTT | 1320 |        |                 |
| Db                         | 1261   | GGGATCATGAGGCATCTTCCCTCTAAACAAATTTAAAGCTGTTTTACCACCTACCTCACCTT | 1320 |        |                 |
| QY                         | 1321   | CTTAAACACCTCTTTTCAGATTAAGCTGAAAGTGTACAGATGGTGGCATCCCTCTCCCT    | 1380 |        |                 |
| Db                         | 1321   | CTTAAACACCTCTTTTCAGATTAAGCTGAAAGTGTACAGATGGTGGCATCCCTCTCCCT    | 1380 |        |                 |
| QY                         | 1381   | TCTCCCATATGCAATTTGCTTAATGTAACCTCTCTTTTGCCATGTTTCCATCTTCGCCA    | 1440 |        |                 |
| Db                         | 1381   | TCTCCCATATGCAATTTGCTTAATGTAACCTCTCTTTTGCCATGTTTCCATCTTCGCCA    | 1440 |        |                 |
| QY                         | 1441   | TCTTGAATTTGTTGTGAGCAATTCATTATCTATTAAACACTAATTTGAG              | 1491 |        |                 |
| Db                         | 1441   | TCTTGAATTTGTTGTGAGCAATTCATTATCTATTAAACACTAATTTGAG              | 1491 |        |                 |
| RESULT 14                  | AX047041   | 1491 bp  | DNA  | linear | PAT 15-DEC-2000 |
| LOCUS                      | Sequence 1 from Patent WO0067788.  |  |      |        |                 |
| DEFINITION                 | AX047041   |  |      |        |                 |
| ACCESSION                  | AX047041.1   | GI:11876459  |      |        |                 |
| VERSION                    |  |  |      |        |                 |
| KEYWORDS                   |  |  |      |        |                 |
| SOURCE                     | Homo sapiens (human)   |  |      |        |                 |
| ORGANISM                   | Homo sapiens   |  |      |        |                 |
| REFERENCE                  | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.   |  |      |        |                 |
| AUTHORS                    | 1 Sturmhoeft, K., Wolf, S.F. and O'Toole, M.   |  |      |        |                 |
| TITLE                      | Use of soluble costimulatory molecules to enhance immune responses   |  |      |        |                 |
| JOURNAL                    | Patent: WO 0067788-A 1 16-NOV-2000;  |  |      |        |                 |
| GENETICS                   | INSTITUTE, INC. (US)   |  |      |        |                 |
| FEATURES                   | Location/Qualifiers  |  |      |        |                 |
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| mat_peptide                | /note="Open reading frame from location 318 to 1181 bp   |  |      |        |                 |
| ORIGIN                     | Alternate polyadenylation signal from location to 1479 bp"   |  |      |        |                 |
| Query Match                | 100.0%; Score 1491; DB 6; Length 1491;   |  |      |        |                 |
| Best Local Similarity      | 100.0%; Pred. No. 0;   |  |      |        |                 |
| Matches 1491; Conservative | 0; Mismatches 0; Indels 0; Gaps 0;   |  |      |        |                 |
| QY                         | 1  | CCAAAGAAAGTGATTTGTCATGCTTTATAGACTGTAAAGAGAGAACTTCAGAGT         | 60   |        |                 |

|   |   |  |                            |
|---|---|--|----------------------------|
| QY  | 781   | CTAATAATTAGAAGGATAATTTGCTCAACCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCT  | 840                        |
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| QY  | 841   | GGTTGGAATAATGGAGAGAAATTAATGGCATCAACAACAAGTTTCCCAAGATCCTGAAA    | 900                        |
| Db  | 841   | GGTTGGAATAATGGAGAGAAATTAATGGCATCAACAACAAGTTTCCCAAGATCCTGAAA    | 900                        |
| QY  | 901   | CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAAACCAACACAGCTTCA   | 960                        |
| Db  | 901   | CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAAACCAACACAGCTTCA   | 960                        |
| QY  | 961   | TGTTGCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAAATACAACCA  | 1020                       |
| Db  | 961   | TGTTGCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAAATACAACCA  | 1020                       |
| QY  | 1021  | AGCAAGAGCATTTTCCCTGATTAACCTGCTCCCATCTCGGGCATTAACCTTAATCTCAGTAA | 1080                       |
| Db  | 1021  | AGCAAGAGCATTTTCCCTGATTAACCTGCTCCCATCTCGGGCATTAACCTTAATCTCAGTAA | 1080                       |
| QY  | 1081  | ATGGAATTTTGTGATATGCTGCTGACCTACTACTGCTTTGCCCAAGATGACAGAGAGAA    | 1140                       |
| Db  | 1081  | ATGGAATTTTGTGATATGCTGCTGACCTACTACTGCTTTGCCCAAGATGACAGAGAGAA    | 1140                       |
| QY  | 1141  | GGAGGAATGAGAGATTGAGAGGGAAGAGTGACGCCCTGTATAACAGTGTCCGAGAGGC     | 1200                       |
| Db  | 1141  | GGAGGAATGAGAGATTGAGAGGGAAGAGTGACGCCCTGTATAACAGTGTCCGAGAGGC     | 1200                       |
| QY  | 1201  | AAGGGCTGAAAAGATCTGAAGTAGCTCCGTCATCTCTTCTGGGATACATGATCGTG       | 1260                       |
| Db  | 1201  | AAGGGCTGAAAAGATCTGAAGTAGCTCCGTCATCTCTTCTGGGATACATGATCGTG       | 1260                       |
| QY  | 1261  | GGATCATGAGGCATTTCTCCCTTAAACAAATTAAGCTGTTTACCCACTACCTCCTT       | 1320                       |
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| QY  | 1381  | TCTCCCATATGCAATTTGCTTAATGTAACCTCTCTTTTGGCAATGTTTCCATCTGCCA     | 1440                       |
| Db  | 1381  | TCTCCCATATGCAATTTGCTTAATGTAACCTCTCTTTTGGCAATGTTTCCATCTGCCA     | 1440                       |
| QY  | 1441  | TCTTGAATTTGCTTCTGAGCCAAATTCATTATCTATTAAACACTAATTTGAG           | 1491                       |
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| RESULT 13   |   |  |                            |
| AR432549  |   |  |                            |
| LOCUS   | AR432549  | 1491 bp  | DNA linear PAT 18-DEC-2003 |
| DEFINITION  | Sequence 1 from patent US 6653444.                |  |                            |
| ACCESSION   | AR432549  |  |                            |
| VERSION   | AR432549.1 GI:40195020                            |  |                            |
| KEYWORDS  | Unknown.  |  |                            |
| SOURCE  | Unknown.  |  |                            |
| ORGANISM  | Unclassified.                                     |  |                            |
| REFERENCE   | 1 (bases 1 to 1491)                               |  |                            |
| AUTHORS   | Freeman, G.J., Freedman, A.S. and Nadler, L.M.    |  |                            |
| TITLE   | Polypeptides comprising a B7 extracellular domain |  |                            |
| JOURNAL   | Patent: US 6653444-A 1 25-NOV-2003;               |  |                            |
| FEATURES  | Location/Qualifiers                               |  |                            |
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|   | /mol_type="genomic DNA"                           |  |                            |
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| Query Match 100.0%; Score 1491; DB 6; Length 1491;            |   |  |                            |
| Best Local Similarity 100.0%; Pred. No. 0;                    |   |  |                            |
| Matches 1491; Conservative 0; Mismatches 0; Indels 0; Gaps 0; |   |  |                            |

|    |      |   |      |
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| QY | 1    | CCAAAGAAAAAGTGATTTGTTGCTATGCTTTATAGACTGTGAAGAGAGAAACATCTCAGAAGT | 60   |
| Db | 1    | CCAAAGAAAAAGTGATTTGTTGCTTTATAGACTGTGAAGAGAGAAACATCTCAGAAGT      | 60   |
| QY | 61   | GGAGTCTTACCTCGAAATCAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCAGCAAGCT     | 120  |
| Db | 61   | GGAGTCTTACCTCGAAATCAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCAGCAAGCT     | 120  |
| QY | 121  | GTGAAACTTAAATCCAAACCTTTTGGAGACCCAGGAAACCCCTCCAAATCTCTGTGTGTGTTT | 180  |
| Db | 121  | GTGAAACTTAAATCCAAACCTTTTGGAGACCCAGGAAACCCCTCCAAATCTCTGTGTGTGTTT | 180  |
| QY | 181  | GTAAACATCACTGGAGGGTCTTCTACGTGAGCAATTTGGATTTGTCATCAGCCCTGCCTGTT  | 240  |
| Db | 181  | GTAAACATCACTGGAGGGTCTTCTACGTGAGCAATTTGGATTTGTCATCAGCCCTGCCTGTT  | 240  |
| QY | 241  | TTGCACCTGGGAAGTGCCTGTTTACTTTGGGTCCAAATTTGTTGGCTTTTCATCTTTTGAC   | 300  |
| Db | 241  | TTGCACCTGGGAAGTGCCTGTTTACTTTGGGTCCAAATTTGTTGGCTTTTCATCTTTTGAC   | 300  |
| QY | 301  | CCTAAGCATCTGAAGCCATGGGCCACACACGGAGGAGGGAACATCACCATCCAAAGTGC     | 360  |
| Db | 301  | CCTAAGCATCTGAAGCCATGGGCCACACACGGAGGAGGGAACATCACCATCCAAAGTGC     | 360  |
| QY | 361  | CATACCTGAAATTTCTTTTCAGCTCTTGTGCTGGTGTGTTCTTCTCATTCTGTTCAGGTG    | 420  |
| Db | 361  | CATACCTGAAATTTCTTTTCAGCTCTTGTGCTGGTGTGTTCTTCTCATTCTGTTCAGGTG    | 420  |
| QY | 421  | TTATCCAGTGCACCAAGGAAGTGAAGAGTGGCAACGCTGCTCTGTGTCACAAATGTTT      | 480  |
| Db | 421  | TTATCCAGTGCACCAAGGAAGTGAAGAGTGGCAACGCTGCTCTGTGTCACAAATGTTT      | 480  |
| QY | 481  | CTGTTGAAGAGCTGGCCAAACTCGCATCTACTTGGCAAAAAGAGAGAAAAATGGTCTCTGA   | 540  |
| Db | 481  | CTGTTGAAGAGCTGGCCAAACTCGCATCTACTTGGCAAAAAGAGAGAAAAATGGTCTCTGA   | 540  |
| QY | 541  | CTATGATCTCTGGGACATGAATATATGCGCCGAGTACAAGAACCGGACCATCTTTTGATA    | 600  |
| Db | 541  | CTATGATCTCTGGGACATGAATATATGCGCCGAGTACAAGAACCGGACCATCTTTTGATA    | 600  |
| QY | 601  | TCACATAAATCCTCCATTGTGATCTGCTCTGCGCCCATCTGACGAGGGGACACATACG      | 660  |
| Db | 601  | TCACATAAATCCTCCATTGTGATCTGCTCTGCGCCCATCTGACGAGGGGACACATACG      | 660  |
| QY | 661  | AGTGTGTTGTTCTGAAGTATGAAAAAGACGCTTTCAAGGGGAAACCTGGCTGGAAGTGA     | 720  |
| Db | 661  | AGTGTGTTGTTCTGAAGTATGAAAAAGACGCTTTCAAGGGGAAACCTGGCTGGAAGTGA     | 720  |
| QY | 721  | CGTTATCAGTCAAAAGCTGACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAACTT   | 780  |
| Db | 721  | CGTTATCAGTCAAAAGCTGACTTCCCTACACCTAGTATATCTGACTTTGAAATTCCAACTT   | 780  |
| QY | 781  | CTAATATTAGAAGGATAATTTGCTTCAACCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCT   | 840  |
| Db | 781  | CTAATATTAGAAGGATAATTTGCTTCAACCTCTGGAGGTTTTCCAGAGCCTCACCTCTCCT   | 840  |
| QY | 841  | GGTTGGAAAAATGGAGAGAAATTAATGGCATCAACAACAAGTTTCCCAAGATCCTGAAA     | 900  |
| Db | 841  | GGTTGGAAAAATGGAGAGAAATTAATGGCATCAACAACAAGTTTCCCAAGATCCTGAAA     | 900  |
| QY | 901  | CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAAACCAACACAGCTTCA    | 960  |
| Db | 901  | CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACAAACCAACACAGCTTCA    | 960  |
| QY | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAAATACAACCA   | 1020 |
| Db | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAAATACAACCA   | 1020 |
| QY | 1021 | AGCAAGAGCATTTTCCCTGATTAACCTGCTCCCATCTCGGGCATTAACCTTAATCTCAGTAA  | 1080 |
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RESULT 11  
AR374162  
LOCUS AR374162 1491 bp mRNA linear PAT 18-DEC-2003  
DEFINITION Sequence 28 from patent US 6605279.  
ACCESSION AR374162  
VERSION AR374162.1 GI:40076753  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 1491)  
AUTHORS Freeman,G.J., Nadler,L.M. and Gray,G.S.  
TITLE Therapeutic compositions for inhibiting the interactions of B7-1 and B7-2 with their natural ligands  
JOURNAL Patent: US 6605279-A 28 12-AUG-2003;  
FEATURES  
source 1. 1491  
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ORIGIN  
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Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1491; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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241 TTGCACTGGGAAGTGGCCCTGCTTACTTGGTCCAAATTTGGCTTTCACATTTTGAC 300  
241 TTGCACTGGGAAGTGGCCCTGCTTACTTGGTCCAAATTTGGCTTTCACATTTTGAC 300  
301 CCTAAGCATCTGAAGCCATGGGCCACACACGAGGAGGAGAAATCATCATCAAGTGTG 360  
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361 CATACCTGAATTTCTTTCAGCTCTTGGTGTGCTGCTTCTTCTTCTTCTTCTTCTT 420  
361 CATACCTGAATTTCTTTCAGCTCTTGGTGTGCTGCTTCTTCTTCTTCTTCTTCTT 420  
421 TTATCCAGCTGACCAAGGATGAAGAGTGGCAACGCTCTCTCTGTGGTTCACAAATGTTT 480

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| JOURNAL                    | Patent: US 6352694-A 1 05-MAR-2002;                                    |
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|                            | /organism="unknown"  |
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| Query Match                | 100.0%; Score 1491; DB 6; Length 1491;                                 |
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| QY                         | 61 GGAGCTTTACCTGAATCAAGAGNTTAAAGAAAAGTGGAAATTTTCTTCAGCAAGCT 120        |
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| QY                         | 121 GTGAAAATTAAATCCACAACTTTTGGAGACCAGGAACACCCCTCCAATCTCTGTGTGTTTT 180  |
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| QY                         | 181 GTAAACATCACTGAGGGTCTTCTACGTGAGCAATTGGATTTGTCATCAGCCCTGCCTGTT 240   |
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| QY                         | 241 TTGCACCTGGGAAGTGCCTGGTCTTACTTGGGTCCAAATTTGTTGGCTTTCACATTTTGAC 300  |
| DB                         | 241 TTGCACCTGGGAAGTGCCTGGTCTTACTTGGGTCCAAATTTGTTGGCTTTCACATTTTGAC 300  |
| QY                         | 301 CCTAAGCATCTGAAGCCATGGGCCACACACGAGGCGAGGGAACATCACCATCCAAGTGC 360    |
| DB                         | 301 CCTAAGCATCTGAAGCCATGGGCCACACACGAGGCGAGGGAACATCACCATCCAAGTGC 360    |
| QY                         | 361 CATACCTGAAATTTCTTTTCAGCTCTTGGTGTCTGGTGTCTTTCTTCTCTGTTCAGTGT 420    |
| DB                         | 361 CATACCTGAAATTTCTTTTCAGCTCTTGGTGTCTGGTGTCTTTCTTCTCTGTTCAGTGT 420    |
| QY                         | 421 TTATCCAGTGCACCAAGAGTGAAGAAGTGGCAACGCTGTCTGTGGTGCACAAATGTTT 480     |
| DB                         | 421 TTATCCAGTGCACCAAGAGTGAAGAAGTGGCAACGCTGTCTGTGGTGCACAAATGTTT 480     |
| QY                         | 481 CTGTTGAAGAGCTGGCAAAACTCGCATCTACTGGCAAAAGAGAGAAATTCGTGCTGA 540      |
| DB                         | 481 CTGTTGAAGAGCTGGCAAAACTCGCATCTACTGGCAAAAGAGAGAAATTCGTGCTGA 540      |
| QY                         | 541 CTATGATGTCCTGGGACATGAATATATGSCCCGAGTACAAGAACGGACCAATCTTTGATA 600   |
| DB                         | 541 CTATGATGTCCTGGGACATGAATATATGSCCCGAGTACAAGAACGGACCAATCTTTGATA 600   |
| QY                         | 601 TCACATAACTCTCCATTCTGATCTGTGGTCTGTGGCCCATCTGACGAGGGCACATACG 660     |
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| QY                         | 661 AGTGTGTTGTTCTGAAGTATGAAAAAGACGCTTTTCAAGCGGGAAACACTGGCTGAAGTGA 720  |
| DB                         | 661 AGTGTGTTGTTCTGAAGTATGAAAAAGACGCTTTTCAAGCGGGAAACACTGGCTGAAGTGA 720  |
| QY                         | 721 CGTTATCAGTCAAAAGCTGACCTTCCTTACACCTAGTATATCTGACTTTTGAATTCCAACTT 780 |
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| QY                         | 781 CTAAATATTAGAAGGATAATTTCCTCAACCTCTGAGGTTTTTCCAGAGCCTCACTCTCCT 840   |
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| QY                         | 841 GGTTGGAAAATGGGAAGAAATTAATGCGCATCAACACAAAGTTTCCCAAGATCCTGAA 900     |
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| QY                         | 901 CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTCAATATGACCAACCAACCAAGCTTCA 960   |

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| Db                         | 901  | CTGAGCTCTATGCTGTTAGCAGCAAACTGGATTTC                          | 960  |
| Qy                         | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAA    | 1020 |
| Db                         | 961  | TGTGTCTCATCAAGTATGGACATTTAAGAGTGAATCAGACCTTCAACTGGAATACAA    | 1020 |
| Qy                         | 1021 | AGCAAGAGCATTTCCTGATAAAGCTGCTCCCATCTCGGGCATTACCTTAATCTCAGTAA  | 1080 |
| Db                         | 1021 | AGCAAGAGCATTTCCTGATAAAGCTGCTCCCATCTCGGGCATTACCTTAATCTCAGTAA  | 1080 |
| Qy                         | 1081 | ATGGAAATTTTGTGATATGCTGCTGACCTTACCTGCTTTGCCCCCAAGATGCAGAGAGAA | 1140 |
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| Qy                         | 1141 | GGAGGAATGAGCATTTGAGAGAGGAAGTGTACGCCCTGTATTAACAGTGTCCCGAGAAGC | 1200 |
| Db                         | 1141 | GGAGGAATGAGCATTTGAGAGAGGAAGTGTACGCCCTGTATTAACAGTGTCCCGAGAAGC | 1200 |
| Qy                         | 1201 | AAGGGGCTGAAAAGATCTGAAAGTAGCCTCCGTCATCTCTTCTGGGATACATGGATCGTG | 1260 |
| Db                         | 1201 | AAGGGGCTGAAAAGATCTGAAAGTAGCCTCCGTCATCTCTTCTGGGATACATGGATCGTG | 1260 |
| Qy                         | 1261 | GGGATCATGAGGATTTCCCTTAACAAATTTAAGCTGTTTTACCACCTACCTCACCCT    | 1320 |
| Db                         | 1261 | GGGATCATGAGGATTTCCCTTAACAAATTTAAGCTGTTTTACCACCTACCTCACCCT    | 1320 |
| Qy                         | 1321 | CTTAAAAACCTCTTTCAGATTAAGCTGAACAGATTCAAGATGGCTGGCATCCCTCTCCTT | 1380 |
| Db                         | 1321 | CTTAAAAACCTCTTTCAGATTAAGCTGAACAGATTCAAGATGGCTGGCATCCCTCTCCTT | 1380 |
| Qy                         | 1381 | TCCTCCCATATGCAATTTGCTTAAGTAACCTCTCTTTTGCCATGTTTCCATCTGCGCA   | 1440 |
| Db                         | 1381 | TCCTCCCATATGCAATTTGCTTAAGTAACCTCTCTTTTGCCATGTTTCCATCTGCGCA   | 1440 |
| Qy                         | 1441 | TCCTGAATTCCTTGTGACGCAATTCATATCTATTAAACACTAAATTTGAG           | 1491 |
| Db                         | 1441 | TCCTGAATTCCTTGTGACGCAATTCATATCTATTAAACACTAAATTTGAG           | 1491 |
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| AR287727                   |      |  |      |
| LOCUS                      |      |  |      |
| DEFINITION                 |      |  |      |
| ACCESSION                  |      |  |      |
| VERSION                    |      |  |      |
| KEYWORDS                   |      |  |      |
| SOURCE                     |      |  |      |
| ORGANISM                   |      |  |      |
| REFERENCE                  |      |  |      |
| AUTHORS                    |      |  |      |
| TITLE                      |      |  |      |
| JOURNAL                    |      |  |      |
| FEATURES                   |      |  |      |
| source                     |      |  |      |
| ORIGIN                     |      |  |      |
| Query Match                |      |  |      |
| Best Local Similarity      |      |  |      |
| Matches 1491; Conservative |      |  |      |
| 0; Mismatches              |      |  |      |
| 0; Indels                  |      |  |      |
| 0; Gaps                    |      |  |      |
| 0;                         |      |  |      |
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| Db                         | 1    | CCAAAGAAAAGTGAATTTGTTCATTTAGCTTTATAGACTGTAAAGAGAGAACTCTCAGAA | 60   |
| Qy                         | 61   | GGAGTCTTACCCTGAATCAAGGATTTAAGAAAAGTGAATTTTCTTCAGCAAGCT       | 120  |
| Db                         | 61   | GGAGTCTTACCCTGAATCAAGGATTTAAGAAAAGTGAATTTTCTTCAGCAAGCT       | 120  |
| Qy                         | 121  | GTGAACTAAATCCACAACTTTTGGAGACCCAGGAACCCCTCCAATCTCTGTGTGTTT    | 180  |

REFERENCE 1 (bases 1 to 1491)  
AUTHORS Sturmhöfel, K., Wolf, S.F. and O'Toole, M.  
TITLE Use of soluble costimulatory molecules to enhance immune responses  
JOURNAL Patent: JP 2002544170-A 1 24-DEC-2002;  
GENETICS INSTITUTE INC  
COMMENT OS Homo sapiens (human)  
PN JP 2002544170-A/1  
PD 24-DEC-2002  
PF 05-MAY-2000 JP 2000616813  
PR 06-MAY-1999 US 60/132944  
PI KNUST STURMHÖFEL, STANLEY F WOLF, MARGOT O'TOOLE PC  
A61K39/39, A61K39/00, A61P13/02, A61P13/08, A61P15/00, PC  
A61P17/00  
PC A61P35/00  
CC Open reading frame from location 318 to 1181 bp CC Alternate  
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DB 961 TGTGCTCTCATCAAGTATGAGACATTTAAGAGTGAATCAAGACCTTCAACTGGGATAACA 1020  
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DB 1021 AGCAAGAGCAATTTTCTGATTAACCTGCTCCCATCTCTGGGCAATTAACCTTAATCTCAGTAA 1080  
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DB 1081 ATGGAATTTTGTGATATGCTGCTGACCTACTGCTTTGCCCCAAGATGACAGAGAGAA 1140  
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QY 1441 TCTTGAATGCTCTGTGTCAGCCAAATTCATTTATTAACACATAATTTGAG 1491  
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## RESULT 9

AR196803  
LOCUS 1491 bp DNA linear PAT 20-APR-2002  
DEFINITION Sequence 1 from patent US 6352694.  
ACCESSION AR196803  
VERSION AR196803.1 GI:20246652  
KEYWORDS Unknown.  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 1491)  
AUTHORS June, C.H., Thompson, C.B., Nabel, G.J., Gray, G.S. and Rennett, P.D.  
TITLE Methods for inducing a population of T cells to proliferate using agents which recognize TCR/CD3 and ligands which stimulate an accessory molecule on the surface of the T cells



|                            |      |  |      |
|----------------------------|------|--|------|
| Qy                         | 1081 | ATGGAATTTTGTGATATGCTGCCTGACCTACTGCTTTTGGCCCAAGATGCAGAGAGAGAA   | 1141 |
| Db                         | 1081 | ATGGAATTTTGTGATATGCTGCCTGACCTACTGCTTTTGGCCCAAGATGCAGAGAGAGAA   | 1140 |
| Qy                         | 1141 | GGAGGAATGAGAGATTGAGAAGGGAAAGTGTAGCCCTGTATACAGTGTCCGACAGAAGC    | 1200 |
| Db                         | 1141 | GGAGGAATGAGAGATTGAGAAGGGAAAGTGTAGCCCTGTATACAGTGTCCGACAGAAGC    | 1200 |
| Qy                         | 1201 | AAGGGCTGAAAGATCTGGAAGTGTAGCCTCCGTCATCTCTCTGGGATACATGGATCGTG    | 1260 |
| Db                         | 1201 | AAGGGCTGAAAGATCTGGAAGTGTAGCCTCCGTCATCTCTCTGGGATACATGGATCGTG    | 1260 |
| Qy                         | 1261 | GGGATCATGAGGCATTTCTCCCTTAAACAAATTTAAAGCTGTTTTACCCACATCCTCACCTT | 1320 |
| Db                         | 1261 | GGGATCATGAGGCATTTCTCCCTTAAACAAATTTAAAGCTGTTTTACCCACATCCTCACCTT | 1320 |
| Qy                         | 1321 | CTTAAAAACCTCTTTCAGATTAAGCTGAAACAGTTACAAGATGGTGGCATCCCTCTCCTT   | 1380 |
| Db                         | 1321 | CTTAAAAACCTCTTTCAGATTAAGCTGAAACAGTTACAAGATGGTGGCATCCCTCTCCTT   | 1380 |
| Qy                         | 1381 | TCCTCCCATATGCAAAATTTGCTTAAATGTAACTCTCTCTTTTGGCCATGTTTCCATTCCTG | 1440 |
| Db                         | 1381 | TCCTCCCATATGCAAAATTTGCTTAAATGTAACTCTCTCTTTTGGCCATGTTTCCATTCCTG | 1440 |
| Qy                         | 1441 | TCTTGAATTTCTTGTGAGCAATTCATTTATCTATCTATTAACACTTAATTGAG          | 1491 |
| Db                         | 1441 | TCTTGAATTTCTTGTGAGCAATTCATTTATCTATCTATTAACACTTAATTGAG          | 1491 |
| RESULT 6                   |      |  |      |
| AR146411                   |      |  |      |
| LOCUS                      |      |  |      |
| DEFINITION                 |      |  |      |
| ACCESSION                  |      |  |      |
| VERSION                    |      |  |      |
| KEYWORDS                   |      |  |      |
| SOURCE                     |      |  |      |
| ORGANISM                   |      |  |      |
| REFERENCE                  |      |  |      |
| AUTHORS                    |      |  |      |
| TITLE                      |      |  |      |
| JOURNAL                    |      |  |      |
| FEATURES                   |      |  |      |
| source                     |      |  |      |
| ORIGIN                     |      |  |      |
| Query Match                |      |  |      |
| Best Local Similarity      |      |  |      |
| Matches 1491; Conservative |      |  |      |
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| Db                         |      |  |      |
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| Qy                         |      |  |      |
| Db                         |      |  |      |
| Qy                         |      |  |      |
| Db                         |      |  |      |
| Qy                         |      |  |      |
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| Qy                         |      |  |      |
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| Qy                         |      |  |      |
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| Qy                         |      |  |      |
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| Qy                         |      |  |      |
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| Db                         |      |  |      |
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| Db                         |      |  |      |
| Qy                         |      |  |      |
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| Qy                         |      |  |      |
| Db                         |      |  |      |
| Qy                         |      |  |      |
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| Qy                         |      |  |      |
| Db                         |      |  |      |
|                            |      |  |      |



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QY 781 CTAATATTAGAGGATAATTTGCTCAACCTCTGGAGGTTTTCAGAGGCTCACCTCTCT 840
Db 781 CTAATATTAGAGGATAATTTGCTCAACCTCTGGAGGTTTTCAGAGGCTCACCTCTCT 840
QY 841 GGTGGAAATGAGAGGATAATTAATGCGCATCAACACAGTTTCCCAAGATCTCTGAAA 900
Db 841 GGTGGAAATGAGAGGATAATTAATGCGCATCAACACAGTTTCCCAAGATCTCTGAAA 900
QY 901 CTGAGCTCTATGCTGTAGCAGCAAACTGGAATTTCAATATGACAAACCAACAGTTTCA 960
Db 901 CTGAGCTCTATGCTGTAGCAGCAAACTGGAATTTCAATATGACAAACCAACAGTTTCA 960
QY 961 TGTGCTCTCATCAAGTATGAGATTTAAGAGTGAATCAGACCTTCACTGGAATACAAACCA 1020
Db 961 TGTGCTCTCATCAAGTATGAGATTTAAGAGTGAATCAGACCTTCACTGGAATACAAACCA 1020
QY 1021 AGCAAGAGCATTTTCTGATAAAGTCTGCTGAGTGAATCAGACCTTCACTGGAATACAAACCA 1080
Db 1021 AGCAAGAGCATTTTCTGATAAAGTCTGCTGAGTGAATCAGACCTTCACTGGAATACAAACCA 1080
QY 1081 ATGGAATTTTGTGATATGCTGCTGACCTACTGCTTTGCGCCCAAGATCAGAGAGAA 1140
Db 1081 ATGGAATTTTGTGATATGCTGCTGACCTACTGCTTTGCGCCCAAGATCAGAGAGAA 1140
QY 1141 GAGGAAATGAGAGATGAGAGGAAAGTGTAGCGCCCTGTATAACAGTGTCCGCGAGAAGC 1200
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Db 1381 TCTCCCATATGCAATTTCTTAATGTAACCTCTCTTTTGGCATGTTTCCATTCTGCA 1440
QY 1441 TCTGAAATGCTGTGACGCAATTCATTATCTATTAAACACTAATTTGAG 1491
Db 1441 TCTGAAATGCTGTGACGCAATTCATTATCTATTAAACACTAATTTGAG 1491

RESULT 5
AR118509
LOCUS
DEFINITION
Sequence 1 from patent US 6149905.
ACCESSION
AR118509
VERSION
AR118509.1 GI:14100419
KEYWORDS
Unknown.
SOURCE
ORGANISM
Unknown.
REFERENCE
1 (bases 1 to 1491)
AUTHORS
Ostrand-Rosenberg,S., Baskar,S., Glincher,L.H., Freeman,G.J. and
Nadler,L.M.
TITLE
Tumor cells with increased immunogenicity and uses therefor
JOURNAL
Patent: US 6149905-A 1 21-NOV-2000;
FEATURES
Location/Qualifiers
1..1491
/organism="unknown"
/mol_type="unassigned DNA"
ORIGIN
Query Match 100.0%; Score 1491; DB 6; Length 1491;
Best Local Similarity 100.0%; Fred. No. 0;
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Db 1 CCAAGAAAAAGTGAATTTGCTCAATGCTTTATAGACTGTAAAGAGAGAACATCTCAGAAGT 60
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Db 61 GGAGTCTTTACCCCTCAAAATCAAGGATTTAAAGAAAAAGTGGAAATTTTCTTCCAGCAAGCT 120
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Db 121 GTGAAACTTAAATCCACAACTTTTGGAGACCCAGGAAACCCCTCCAATCTCTGTGTGTTT 180
QY 181 GTAAACATCATCTGAGGGTCTTCTACGTGAGCAATTTGATTTGTCTATCAGCCCTCCCTGTT 240
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QY 541 CTATGATGCTCTGGGACATGAATATATATGCGCCGAGTACAAGAACCGGACCATCTTTGATA 600
Db 541 CTATGATGCTCTGGGACATGAATATATATGCGCCGAGTACAAGAACCGGACCATCTTTGATA 600
QY 601 TCATTAATACCTCTCCATTGTGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
Db 601 TCATTAATACCTCTCCATTGTGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
QY 661 AGTGTGTTGTTCTGAAGTATGAAAGAGAGCTTTCAAGCGGGAACACCTGGCTGGAAGTGA 720
Db 661 AGTGTGTTGTTCTGAAGTATGAAAGAGAGCTTTCAAGCGGGAACACCTGGCTGGAAGTGA 720
QY 721 CGTTATCAGTCAAAAGCTGACTTCCCTACACTAGTATATCTGACTTTGAAATTTCCAACTT 780
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Qy 361 CATACCTGAATTTCTTCTAGTCTTGGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420

Db 361 CATACCTGAATTTCTTCTAGTCTTGGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420

Qy 421 TTATCACCTGACCAAGGAAGTGAAGAGAGTGGCAACGCTGCTGCTGCTGCTGCTGCTG 480

Db 421 TTATCACCTGACCAAGGAAGTGAAGAGAGTGGCAACGCTGCTGCTGCTGCTGCTGCTG 480

Qy 481 CTGTTGAAGAGCTGGCAACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 540

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Qy 541 CTATGATGCTGGGACATGAATATATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 600

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Db 841 GGTGGAAATGAGAGGAATTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 900

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Qy 1441 TCTTGAATTTGCTTTGTGTCAGCCAAATTCATTATCTATTAAACACTAAATTTGAG 1491

Db 1441 TCTTGAATTTGCTTTGTGTCAGCCAAATTCATTATCTATTAAACACTAAATTTGAG 1491

RESULT 3

AR097323

LOCUS AR097323 1491 bp DNA linear PAT 14-FEB-2001

DEFINITION Sequence 1 from patent US 6071716.

ACCESSION AR097323

VERSION AR097323.1 GI:12806053

KEYWORDS

SOURCE Unknown.

ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 1491)

AUTHORS Freeman, G. J., Freedman, A. S. and Nadler, L. M.

TITLE DNA encoding, B7, a new member of the IG superfamily with unique expression on activated and neoplastic B cells

JOURNAL Patent: US 6071716-A 1 06-JUN-2000;

FEATURES

source

1. 1491

/organism="unknown"

/mol\_type="unassigned DNA"

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Query Match 100.0%; Score 1491; DB 6; Length 1491;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1491; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCAAGAAAAAGTATTTGCTGCTTATAGACTGTAAAGAGAGAACATCTCAGAGT 60

Db 1 CCAAGAAAAAGTATTTGCTGCTTATAGACTGTAAAGAGAGAACATCTCAGAGT 60

Qy 61 GGAGTCTTACCTGAAATCAAGGATTTAAAGAAAAAGTGGAAATTTTCTCAGCAAGCT 120

Db 61 GGAGTCTTACCTGAAATCAAGGATTTAAAGAAAAAGTGGAAATTTTCTCAGCAAGCT 120

Qy 121 GTGAACTAAATCCACACCTTTGGAGACCCAGGACACCTCCCAATCTCTGTGTTTT 180

Db 121 GTGAACTAAATCCACACCTTTGGAGACCCAGGACACCTCCCAATCTCTGTGTTTT 180

Qy 181 GTAAACATCACTGGAGGGTCTTCTACGTGAGCAATTTGATTTGTCATCAGCCCTGCTGTT 240

Db 181 GTAAACATCACTGGAGGGTCTTCTACGTGAGCAATTTGATTTGTCATCAGCCCTGCTGTT 240

Qy 241 TTGACCTGGAGAGTGGCTGCTTACTTGGTGCCTGCTGCTGCTGCTGCTGCTGCTGCTG 300

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Qy 301 CTTAAGCATCTGAAGCCATGGGCAACACGAGGAGGAGGAAATCAACCAATCAAGTGTG 360

Db 301 CTTAAGCATCTGAAGCCATGGGCAACACGAGGAGGAGGAAATCAACCAATCAAGTGTG 360

Qy 361 CATACCTGAATTTCTTCTAGTCTTGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420

Db 361 CATACCTGAATTTCTTCTAGTCTTGGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 420

Qy 421 TTATCCAGTCAACCAAGGAGTGAAGAGGAGGCAACGCTGCTGCTGCTGCTGCTGCTGCTG 480

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|----------------------------|----------------------------|--|---|----------------------------|
|                            | Qy                         | 961  | TGTTGTCTCATCAAGTATCGACATTAAAGAGTGGAATCAGACTTCCTCAACTGGTAATACAACCA | 1021                       |
|                            | Dd                         | 961  | TGTTGTCTCATCAAGTATCGACATTAAAGAGTGGAATCAGACTTCCTCAACTGGTAATACAACCA | 1020                       |
|                            | Qy                         | 1021   | AGCAAAGAGCATTTCCTGCATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCAGTAA     | 1080                       |
|                            | Dd                         | 1021   | AGCAAAGAGCATTTCCTGCATAACCTGCTCCCATCCTGGGCCATTACCTTAATCTCAGTAA     | 1080                       |
|                            | Qy                         | 1081   | ATGGGAATTTTTGTGATATGCTGCCTGACCTACTCTCTTTGGCCCCAAGATGCAGAGAGAGAA   | 1140                       |
|                            | Dd                         | 1081   | ATGGGAATTTTTGTGATATGCTGCCTGACCTACTCTCTTTGGCCCCAAGATGCAGAGAGAGAA   | 1140                       |
|                            | Qy                         | 1141   | GGAGGAATCAGAGATTGAGAAGGGAAGGTGACGCCCTGTATACAGTGTCCGAGAAGC         | 1200                       |
|                            | Dd                         | 1141   | GGAGGAATCAGAGATTGAGAAGGGAAGGTGACGCCCTGTATACAGTGTCCGAGAAGC         | 1200                       |
|                            | Qy                         | 1201   | AAGGGGCTGAAAAGATCTGAAGTAGCCTCCGTCACTCTCTCTGGGATACATGGATCGTG       | 1260                       |
|                            | Dd                         | 1201   | AAGGGGCTGAAAAGATCTGAAGTAGCCTCCGTCACTCTCTCTGGGATACATGGATCGTG       | 1260                       |
|                            | Qy                         | 1261   | GGGATCATGAGGCATTCTTCCTTAAACAAATTTAAGCTGTTTTACCACCTACCTCACCTT      | 1320                       |
|                            | Dd                         | 1261   | GGGATCATGAGGCATTCTTCCTTAAACAAATTTAAGCTGTTTTACCACCTACCTCACCTT      | 1320                       |
|                            | Qy                         | 1321   | CTTAAAAACCTCTTTTCAGATTAAGCTGAACAGTTTACAGATGGCTGGCATCCCTCTCTCTT    | 1380                       |
|                            | Dd                         | 1321   | CTTAAAAACCTCTTTTCAGATTAAGCTGAACAGTTTACAGATGGCTGGCATCCCTCTCTCTT    | 1380                       |
|                            | Qy                         | 1381   | TCTCCCACATATCAATTTGCTTTAATGTAACTCTCTCTTTTGGCCATGTTCCATTCTGCCA     | 1440                       |
|                            | Dd                         | 1381   | TCTCCCACATATCAATTTGCTTTAATGTAACTCTCTCTTTTGGCCATGTTCCATTCTGCCA     | 1440                       |
|                            | Qy                         | 1441   | TCTTGAATTTGCTTGTACGCCAATTCATTATCTATTAAACACTAATTTTGG               | 1491                       |
|                            | Dd                         | 1441   | TCTTGAATTTGCTTGTACGCCAATTCATTATCTATTAAACACTAATTTTGG               | 1491                       |
| RESULT 2                   |                            |  |   |                            |
| AR030782                   |                            | AR030782   | 1491 bp   | DNA linear PAT 29-SEP-1999 |
| LOCUS                      |                            | Sequence 5 from patent US 5861310.                                 |   |                            |
| DEFINITION                 |                            | AR030782   |   |                            |
| ACCESSION                  |                            | AR030782   |   |                            |
| VERSION                    |                            | AR030782.1 GI:5943996  |   |                            |
| KEYWORDS                   |                            | Unknown.   |   |                            |
| SOURCE                     |                            | Unassigned.  |   |                            |
| ORGANISM                   |                            | Freeman,G.J., Nadler,L.M. and Gray,G.S.                            |   |                            |
| REFERENCE                  |                            | 1 (bases 1 to 1491)  |   |                            |
| AUTHORS                    |                            | Tumor cells modified to express B7-2 with increased immunogenicity |   |                            |
| TITLE                      |                            | and uses therefor  |   |                            |
| JOURNAL                    |                            | Patent: US 5861310-A 5 19-JAN-1999;                                |   |                            |
| FEATURES                   |                            | Location/Qualifiers  |   |                            |
|                            | source                     | 1..1491  |   |                            |
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|                            | /mol_type="unassigned DNA" |  |   |                            |
| ORIGIN                     |                            |  |   |                            |
| Query Match                |                            | 100.0%; Score 1491; DB 6; Length 1491;                             |   |                            |
| Best Local Similarity      |                            | 100.0%; Pred. No. 0;   |   |                            |
| Matches 1491; Conservative |                            | 0; Mismatches 0; Indels 0; Gaps 0;                                 |   |                            |
| Qy                         | 1                          | CCAAAGAAAAGTGATTTGTCATTGCTTTATAGACTGTAAAGAGAACATCTCAGAAGT          | 60  |                            |
| Dd                         | 1                          | CCAAAGAAAAGTGATTTGTCATTGCTTTATAGACTGTAAAGAGAACATCTCAGAAGT          | 60  |                            |
| Qy                         | 61                         | GGAGTCTTACCTTGAATCAAGGAATTAAGAAAAGTGGAATTTTCTTCAGCAAGCT            | 120   |                            |
| Dd                         | 61                         | GGAGTCTTACCTTGAATCAAGGAATTAAGAAAAGTGGAATTTTCTTCAGCAAGCT            | 120   |                            |
| Qy                         | 121                        | GTGAAACTAAATCCACAACTTTGGAGACCAGGAACACCCCTCCAATCTCTGTGTGTTT         | 180   |                            |
| Dd                         | 121                        | GTGAAACTAAATCCACAACTTTGGAGACCAGGAACACCCCTCCAATCTCTGTGTGTTT         | 180   |                            |
| Qy                         | 181                        | GTAACATCACTGGAGGGTCTTCTAGCTGAGCAATTTGANTTGTCACTAGCCCTGCCGTGTT      | 240   |                            |
| Dd                         | 181                        | GTAACATCACTGGAGGGTCTTCTAGCTGAGCAATTTGANTTGTCACTAGCCCTGCCGTGTT      | 240   |                            |
| Qy                         | 241                        | TTGCACCTGGAAAGTGCCTGGTCTTACTTGGGTCCAAATTTGCTGGCTTTTACATTTTAC       | 300   |                            |
| Dd                         | 241                        | TTGCACCTGGAAAGTGCCTGGTCTTACTTGGGTCCAAATTTGCTGGCTTTTACATTTTAC       | 300   |                            |
| Qy                         | 301                        | CCTAAGCATCTGAAGCCATGGGCCACACACGAGGAGGGAACATCAACATCCAAAGTGC         | 360   |                            |
| Dd                         | 301                        | CCTAAGCATCTGAAGCCATGGGCCACACACGAGGAGGGAACATCAACATCCAAAGTGC         | 360   |                            |
| Qy                         | 361                        | CATACCTGAAATTTCTTTTCAGCTCTGCTGCTGGCTCTTCTCTCATCTTCTGTTCAAGTG       | 420   |                            |
| Dd                         | 361                        | CATACCTGAAATTTCTTTTCAGCTCTGCTGCTGGCTCTTCTCTCATCTTCTGTTCAAGTG       | 420   |                            |
| Qy                         | 421                        | TTATCCACGTGACCAAGGAAGTGAAGAGTGGCAACCGCTGCTCTGTGGTCACAATGTTT        | 480   |                            |
| Dd                         | 421                        | TTATCCACGTGACCAAGGAAGTGAAGAGTGGCAACCGCTGCTCTGTGGTCACAATGTTT        | 480   |                            |
| Qy                         | 481                        | CTGTTGAGAGCTGGCACAACTCGCATCTCTGCGAAGGAGGAGAAATGGTGCTGA             | 540   |                            |
| Dd                         | 481                        | CTGTTGAGAGCTGGCACAACTCGCATCTCTGCGAAGGAGGAGAAATGGTGCTGA             | 540   |                            |
| Qy                         | 541                        | CTATGATGCTGGGGACATGAATATATATGCCCAGGTACAGAACCGGACCATCTTTGATA        | 600   |                            |
| Dd                         | 541                        | CTATGATGCTGGGGACATGAATATATATGCCCAGGTACAGAACCGGACCATCTTTGATA        | 600   |                            |
| Qy                         | 601                        | TCACATAAACCTCTCGATTGATCCTGGCTCTGGCCCATCTGACAGGGCACATACG            | 660   |                            |
| Dd                         | 601                        | TCACATAAACCTCTCGATTGATCCTGGCTCTGGCCCATCTGACAGGGCACATACG            | 660   |                            |
| Qy                         | 661                        | AGTGCTGTGTTCTGAAGTATGAAAAGAGCGCTTTCAAGCGGGAACAACCTGGCTGAAGTGA      | 720   |                            |
| Dd                         | 661                        | AGTGCTGTGTTCTGAAGTATGAAAAGAGCGCTTTCAAGCGGGAACAACCTGGCTGAAGTGA      | 720   |                            |
| Qy                         | 721                        | CGTTATCAGTCAAAGCTGACTTCCCTPACACCTAGTATATCTGACTTTGAAATTCGAACTT      | 780   |                            |
| Dd                         | 721                        | CGTTATCAGTCAAAGCTGACTTCCCTPACACCTAGTATATCTGACTTTGAAATTCGAACTT      | 780   |                            |
| Qy                         | 781                        | CTAATATTAGAGGAATTTGCTCAACTCTGGAGTTTTCCAGAGCTCACCTCTCCT             | 840   |                            |
| Dd                         | 781                        | CTAATATTAGAGGAATTTGCTCAACTCTGGAGTTTTCCAGAGCTCACCTCTCCT             | 840   |                            |
| Qy                         | 841                        | GGTTGGAATAATGGAGGAAGTAATTAATGCCATCAACACAGTITTCCTCAAGTCTCGAAA       | 900   |                            |
| Dd                         | 841                        | GGTTGGAATAATGGAGGAAGTAATTAATGCCATCAACACAGTITTCCTCAAGTCTCGAAA       | 900   |                            |
| Qy                         | 901                        | CTGAGCTCTATGCTGTAGCAGCAAACTGGATTTCAATATGCAACCAACACAGCTTCA          | 960   |                            |
| Dd                         | 901                        | CTGAGCTCTATGCTGTAGCAGCAAACTGGATTTCAATATGCA                         |   |                            |

[illegible]

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: March 20, 2004, 12:21:06 ; Search time 6054.8 Seconds  
(without alignments)  
10673.268 Million cell updates/sec

Title: US-09-962-969B-18  
Perfect score: 1491  
Sequence: 1 CCAAGAAAAGTGATTGT.....CTATTAAACACAAATTGAG 1491

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters: 5940544

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

GenEmbl.\*  
1: gb\_ba.\*  
2: gb\_hgt.\*  
3: gb\_in.\*  
4: gb\_om.\*  
5: gb\_ov.\*  
6: gb\_pat.\*  
7: gb\_ph.\*  
8: gb\_pl.\*  
9: gb\_pr.\*  
10: gb\_ro.\*  
11: gb\_sts.\*  
12: gb\_sv.\*  
13: gb\_un.\*  
14: gb\_vl.\*  
15: em\_ba.\*  
16: em\_fun.\*  
17: em\_hum.\*  
18: em\_in.\*  
19: em\_mu.\*  
20: em\_om.\*  
21: em\_or.\*  
22: em\_ov.\*  
23: em\_pat.\*  
24: em\_ph.\*  
25: em\_pl.\*  
26: em\_ro.\*  
27: em\_sts.\*  
28: em\_un.\*  
29: em\_vi.\*  
30: em\_htg\_hum.\*  
31: em\_htg\_inv.\*  
32: em\_htg\_other.\*  
33: em\_htg\_mus.\*  
34: em\_htg\_pin.\*  
35: em\_htg\_rnd.\*  
36: em\_htg\_mam.\*  
37: em\_htg\_vrt.\*  
38: em\_sy.\*  
39: em\_higo\_hum.\*  
40: em\_higo\_mus.\*  
41: em\_higo\_other.\*

score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score  | Query Match | Length | DB ID | Description                |
|------------|--------|-------------|--------|-------|----------------------------|
| 1          | 1491   | 100.0       | 1491   | 6     | AR028770 Sequence          |
| 2          | 1491   | 100.0       | 1491   | 6     | AR030782 Sequence          |
| 3          | 1491   | 100.0       | 1491   | 6     | AR097323 Sequence          |
| 4          | 1491   | 100.0       | 1491   | 6     | AR112769 Sequence          |
| 5          | 1491   | 100.0       | 1491   | 6     | AR118509 Sequence          |
| 6          | 1491   | 100.0       | 1491   | 6     | AR146411 Sequence          |
| 7          | 1491   | 100.0       | 1491   | 6     | AR178603 Sequence          |
| 8          | 1491   | 100.0       | 1491   | 6     | BD272168 Use of so         |
| 9          | 1491   | 100.0       | 1491   | 6     | AR196803 Sequence          |
| 10         | 1491   | 100.0       | 1491   | 6     | AR287727 Sequence          |
| 11         | 1491   | 100.0       | 1491   | 6     | AR374162 Sequence          |
| 12         | 1491   | 100.0       | 1491   | 6     | AR381493 Sequence          |
| 13         | 1491   | 100.0       | 1491   | 6     | AR432549 Sequence          |
| 14         | 1491   | 100.0       | 1491   | 6     | AX047041 Sequence          |
| 15         | 1489.4 | 99.9        | 1491   | 6     | AJ7283 Sequence 23         |
| 16         | 1489.4 | 99.9        | 1491   | 6     | AR091392 Sequence          |
| 17         | 1489.4 | 99.9        | 1491   | 6     | AR178979 Sequence          |
| 18         | 1489.4 | 99.9        | 1491   | 6     | BD267798 Methods a         |
| 19         | 1489.4 | 99.9        | 1491   | 9     | HUMIGB7 M27533 Human Ig re |
| 20         | 1489.4 | 99.9        | 1549   | 6     | AX204865 Sequence          |
| 21         | 1222.4 | 82.0        | 2824   | 9     | BC042665 Homo sapi         |
| 22         | 868.2  | 58.2        | 879    | 6     | AR147734 Sequence          |
| 23         | 868.2  | 58.2        | 879    | 6     | AR159756 Sequence          |
| 24         | 868.2  | 58.2        | 879    | 6     | AR160448 Sequence          |
| 25         | 868.2  | 58.2        | 879    | 6     | AR202404 Sequence          |
| 26         | 868.2  | 58.2        | 879    | 6     | AR235981 Sequence          |
| 27         | 865.4  | 58.0        | 867    | 6     | AR052870 Sequence          |
| 28         | 865.4  | 58.0        | 867    | 6     | BD237356 Improve           |
| 29         | 865.4  | 58.0        | 867    | 6     | AR253313 Sequence          |
| 30         | 865.4  | 58.0        | 867    | 6     | AR288182 Sequence          |
| 31         | 865.4  | 58.0        | 867    | 6     | AX027023 Sequence          |
| 32         | 865.4  | 58.0        | 867    | 6     | BD137934 Optimizat         |
| 33         | 860.6  | 57.7        | 867    | 6     | AX440883 Sequence          |
| 34         | 851    | 57.1        | 867    | 6     | AX440657 Sequence          |
| 35         | 844.6  | 56.6        | 867    | 6     | AX440632 Sequence          |
| 36         | 843    | 56.5        | 867    | 6     | AX440633 Sequence          |
| 37         | 841.4  | 56.4        | 867    | 6     | AX440769 Sequence          |
| 38         | 841.4  | 56.4        | 867    | 6     | AX440779 Sequence          |
| 39         | 836.6  | 56.1        | 867    | 6     | AX440768 Sequence          |
| 40         | 835    | 56.0        | 868    | 6     | AX440641 Sequence          |
| 41         | 835    | 56.0        | 868    | 6     | AX440645 Sequence          |
| 42         | 835    | 56.0        | 868    | 6     | AX440650 Sequence          |
| 43         | 834    | 55.9        | 867    | 6     | AX440757 Sequence          |
| 44         | 834    | 55.9        | 867    | 6     | AX440759 Sequence          |
| 45         | 833.4  | 55.9        | 867    | 6     | AX440782 Sequence          |

ALIGNMENTS

RESULT 1  
AR028770  
LOCUS AR028770 1491 bp DNA linear PAT 29-SEP-1999  
DEFINITION Sequence 1 from patent US 5858776.  
ACCESSION AR028770  
VERSION AR028770.1 GI:5940743  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unclassified.  
REFERENCE 1 (bases 1 to 1491)  
AUTHORS Ostrand-Rosenberg, S., Baskar, S., Glimcher, L.H., Freeman, G.J. and Nadler, L.M.  
TITLE Tumor cells with increased immunogenicity and uses therefor  
JOURNAL Patent: US 5858776-A 1 12-JAN-1999;

Pred. No. is the number of results predicted by chance to have a